INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON
RADIOCOMMUNICATIONS AND SEARCH
AND RESCUE
17th session
Agenda item 17

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REPORT TO THE MARITIME SAFETY COMMITTEE

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LIST OF ANNEXES

1 GENERAL

1.1 The Sub-Committee on Radiocommunications and Search and Rescue held its seventeenth session from 21 to 25 January 2013 under the Chairmanship of Mr. C. Salgado (Chile). The Vice-Chairman, Mr. Ringo Lakeman (the Netherlands), who was elected Vice-Chairman at the start of the meeting was also present.

1.2 The session was attended by delegations and observers from Member Governments, international organizations and non-governmental organizations in consultative status as listed in document COMSAR 17/INF.1.

Secretary-General's opening address

1.3 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link: http://www.imo.org/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings.

Chairman's remarks

1.4 In responding, the Chairman thanked the Secretary-General for his words of guidance and encouragement and assured the Secretary-General that his advice and requests would be given every consideration in the deliberations of the Sub-Committee and its working groups.

Statement by delegations

1.5 The delegation of Venezuela (Bolivarian Republic of) informed the Sub-Committee of an ongoing Search and Rescue operation in the area of Los Roques Archipelago involving the disappearance of an aircraft with two Venezuelan crew members and four passengers of Italian nationality. The Venezuelan SAR Organization was in constant contact with the Italian authorities regarding the air and sea searches for the aircraft.

1.6 The delegation of New Zealand informed the Sub-Committee of a Search and Rescue operation for an aircraft which had disappeared over Antarctica with three Canadian citizens on board. The operation was hampered by bad weather conditions.

Adoption of the agenda and related matters

1.7 The Sub-Committee adopted the agenda (COMSAR 17/1), and agreed, in general, that the work of the Sub-Committee should be guided by the annotations to the provisional agenda and timetable (COMSAR 17/1/1, as amended). The agenda, as adopted, together with the list of documents considered under each agenda item, is set out in document COMSAR 17/INF.9.

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the decisions and comments pertaining to its work by FSI 20, MSC 90, C 108, NAV 58, C 109 and MSC 91 (COMSAR 17/2 and COMSAR 17/2/1) and took them into account in its deliberations under the relevant agenda items.

3 GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

REVIEW AND MODERNIZATION OF THE GMDSS

3.1 The Sub-Committee noted:

.1 the outcome of MSC 90 (MSC 90/28, paragraphs 8.10 to 8.13);

.2 that the Joint IMO/ITU Experts Group had considered the report of the Correspondence Group on the Review of the GMDSS and other submissions received and provided advice for consideration by the Sub-Committee as given in document COMSAR 17/4; and

.3 that the ICAO/IMO Joint Working Group on SAR had discussed the issues listed for the High-level review and provided its views for consideration by the Sub-Committee as given in document COMSAR 17/6.

Report of the eighth meeting of the Joint IMO/ITU Experts Group

3.2 The Sub-Committee considered the relevant part of document COMSAR 17/4 (Secretariat) providing the report of the eighth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters, which took place from 8 to 12 October 2012, under the chairmanship of Mr. K. Fisher (United Kingdom), and decided to refer the issues related to the review of the GMDSS to the Technical Working Group for detailed consideration and to provide comments and advice.

Report of the nineteenth session of the ICAO/IMO Joint Working Group

3.3 The Sub-Committee further considered the relevant part of document COMSAR 17/6 (Secretariat) providing the report of the nineteenth session of the ICAO/IMO Joint Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue, held in Hong Kong, China, from 10 to 14 September 2012, under the Chairmanship of Mr. D. Edwards (United States) and decided to refer the issue related to the review of the GMDSS to the Technical Working Group for detailed consideration and to provide comments and advice.

Overarching principles and their consequential corollaries

3.4 The Sub-Committee considered the proposal submitted by the United States (COMSAR 17/3/4) on certain overarching principles based upon lessons learned from the existing GMDSS, and their consequential corollaries.

3.5 During the ensuing discussions, the following views were expressed:

.1 the added value of considering certain overarching principles when performing the review and modernization of the GMDSS was acknowledged;

.2 such principles should be absolutely unambiguous, realistic and achievable, and be supported by a vast majority of Contracting Governments and observers;

.3 the relation between the proposed principles and the suggested corollaries was not always clear;

.4 a review and establishment of such principles should be executed with care and within the generally agreed time frame in line with the Work Plan; and

.5 the correspondence group could be tasked to further consider the matter.

3.6 After some discussion, the Sub-Committee referred the issue to the Technical Working Group for detailed consideration and to provide comments and advice.

Non-SOLAS ships such as domestic ships and fishing vessels

3.7 The Sub-Committee considered the view expressed by Japan (COMSAR 17/3/5) that existing radiocommunication systems, established in the domestic regulations of each State, should be taken into account when reviewing the GMDSS. In this regard, the Sub-Committee noted the GMDSS requirements in the Cape Town Agreement of 2012 on the Implementation of the Provisions of the Torremolinos Protocol 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, and the view of Japan that output from future discussion by the SLF Sub-Committee should also be respected.

3.8 After a brief discussion, the Sub-Committee, supporting the proposal by Japan, decided to refer the document to the Technical Working Group for detailed consideration and to provide comments and advice on how existing radiocommunication systems, established in the domestic regulations of each State, should be taken into account when reviewing the GMDSS.

ESTABLISHMENT OF THE TECHNICAL WORKING GROUP

3.9 The Sub-Committee established the Technical Working Group under the Chairmanship of Mr. Alexander Schwarz (Germany) and instructed it, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider document COMSAR 17/4, annex, paragraphs 25 to 57, taking into account document COMSAR 17/6, annex, section 7.3 and, in particular, provide comments and advice on:

.1 the proposed draft new SOLAS definition for General communications (COMSAR 17/4, paragraph 2.2.1);

.2 the need to amend the SOLAS definition on Maritime Safety Information (MSI) to include security related requirements (COMSAR 17/4, paragraph 2.2.3);

.3 the proposal for a new set of functional requirements for radiocommunications in SOLAS chapter IV (COMSAR 17/4, paragraph 2.2.5);

.4 the proposal to maintain four priorities to be associated with voice messages and two priorities to control the radio link (COMSAR 17/4, paragraph 2.2.6);

.5 the view of the Experts Group on the specified services, systems and technologies which should not form part of the international system (COMSAR 17/4, paragraph 2.2.7);

.6 the list of systems and technologies which might be included in the modernized GMDSS (COMSAR 17/4, paragraph 2.2.9);

.7 the continued need to broadcast information to a large number of vessels at the same time, preferably using one single type of communication (COMSAR 17/6, annex, paragraph 7.3.2.5);

.8 the continued requirement to have a communication system by which many ships could follow communications between other ships, on-scene coordinator and RCC (COMSAR 17/6, annex, paragraph 7.3.2.6);

.9 the view of the Experts Group that the existing sea areas should be retained (COMSAR 17/4, paragraph 2.2.10);

.10 the need to take non-SOLAS ships into account when reviewing the GMDSS (COMSAR 17/6, annex, paragraph 7.3.2.8);

.11 the concept of a GMDSS Code (COMSAR 17/4, paragraph 2.2.11); and

.12 the view of the Experts Group that the existing methodology of defining functional operational requirements followed by prescriptive equipment requirements was adequate (COMSAR 17/4, paragraph 2.2.13);

.2 consider document COMSAR 17/3/4 (United States) and provide comments and advice on the proposed overarching principles and their consequential corollaries;

.3 consider document COMSAR 17/3/5 (Japan) and provide advice on how existing radiocommunication systems, established in domestic regulation of each State, should be taken into account when reviewing the GMDSS;

.4 prepare a first draft of the document containing the outcome of the High-level review of the GMDSS, clearly identifying issues which need further consideration by and advice from the correspondence group and the Joint IMO/ITU Experts Group;

.5 prepare draft terms of reference for the Correspondence Group on the Review of the GMDSS for the intersessional work to be done between COMSAR 17 and the next session of the Sub-Committee, reporting to meetings of the Joint IMO/ITU Experts Group, as appropriate,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

3.10 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4/Add.1), the Sub-Committee noted that due to the workload of the Technical Working Group it had not been possible to consider the tasks given under the agenda item on the review and modernization of the GMDSS. In order to progress the work, the Sub-Committee re-established the Correspondence Group on the Review of the GMDSS under the

coordination of the United States*, approved its terms of reference as set out in the annex to document COMSAR 17/WP.4/Add.1, and invited the Committee to endorse the above action.

FURTHER DEVELOPMENT OF THE GMDSS MASTER PLAN ON SHORE-BASED FACILITIES

3.11 The Sub-Committee noted the information provided by the Secretariat on amendments to the GMDSS Master Plan as circulated by GMDSS.1/Circ.14 on 18 December 2012.

Revision of annex 7 of MSC.1/Circ.1382/Rev.1

3.12 The Sub-Committee briefly considered the proposal of IHO (COMSAR 17/3/1) on amendments to annex 7 of MSC.1/Circ.1382/Rev.1 containing the Questionnaire on Shore-based Facilities for the GMDSS and decided to refer the document to the Technical Working Group for detailed consideration and the preparation of a revision of annex 7 of MSC.1/Circ.1382/Rev.1.

Instructions for the Technical Working Group

3.13 The Sub-Committee instructed the Technical Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider document COMSAR 17/3/1 and prepare a revision of annex 7 of MSC.1/Circ.1382/Rev.1,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

3.14 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, paragraph 3.1), the Sub-Committee endorsed the revised annex 7 to MSC.1/Circ.1382/Rev.1, as set out in annex 1, and invited the Committee to approve it for dissemination as MSC.1/Circ.1382/Rev.2, after including the revised annex 7.

CONSIDERATION OF OPERATIONAL AND TECHNICAL COORDINATION PROVISIONS OF MARITIME SAFETY INFORMATION (MSI) SERVICES, INCLUDING REVIEW OF THE RELATED DOCUMENTS

International NAVTEX Coordinating Panel

3.15 The Sub-Committee noted with appreciation the report by the Chairman of the IMO NAVTEX Coordinating Panel (COMSAR 17/3/2) providing a summary of the current issues being addressed by the IMO International NAVTEX Coordinating Panel and its actions/activities since COMSAR 16.

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Outcome of the fourth session of the IHO World-Wide Navigational Warnings Service Sub-Committee (WWNWS)

3.16 In considering document COMSAR 17/3/3 (IHO), the Sub-Committee noted with appreciation the matters discussed and decisions taken at the fourth session of the IHO WWNWS Sub-Committee which was held from 24 to 28 September 2012.

Review of resolutions A.705(17) and A.706(17), as amended

3.17 The Sub-Committee recalled that, following the completion of the holistic review of all World-Wide Navigational Warning Service documentation, the IHO WWNWS Sub-Committee had noted the need for further amendments to the previously revised documents in order to ensure consistency of terminology and guidance.

3.18 The Sub-Committee considered document COMSAR 17/3 (IHO and WMO) proposing draft amendments to resolutions A.705(17) and A.706(17), as amended by MSC.1/Circ.1287 and MSC.1/Circ.1288, respectively, and decided to refer the document to the Technical Working Group for detailed consideration and to prepare associated amended draft MSC circulars.

Instructions for the Technical Working Group

3.19 The Sub-Committee instructed the Technical Working Group, taking into account decisions of, and comments and proposals made in the Plenary, to:

.1 consider document COMSAR 17/3 on the proposed draft amendments to resolutions A.705(17) and A.706(17), as amended, and prepare associated amended draft MSC circulars for approval by the Committee,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

3.20 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, paragraph 3.2), the Sub-Committee endorsed the revised draft MSC circulars on amendments to resolutions A.705(17) and A.706(17), as amended, as set out in annexes 2 and 3, and invited the Committee to approve them for dissemination as MSC.1/Circ.1287/Rev.1 and MSC.1/Circ.1288/Rev.1, respectively.

4 ITU MARITIME RADIOCOMMUNICATION MATTERS

CONSIDERATION OF RADIOCOMMUNICATION ITU-R STUDY GROUP MATTERS

4.1 The Sub-Committee noted the outcome of NAV 58 (NAV 58/14, paragraphs 5.3 to 5.5 and 5.15).

4.2 The Sub-Committee further noted the outcome of ITU-R's Working Party 5B meeting of November 2012 (COMSAR 17/4/2, paragraphs 5 to 18).

CONSIDERATION OF ITU WORLD RADIOCOMMUNICATION CONFERENCE MATTERS

4.3 The Sub-Committee noted the outcome of NAV 58 (NAV 58/14, paragraphs 5.6, 5.7 and 5.16 to 5.18), in relation to the preparation for WRC-15.

Report of the eighth meeting of the Joint IMO/ITU Experts Group

4.4 The Sub-Committee decided to refer the relevant issues contained in the report of the Experts Group (COMSAR 17/4) to the Technical Working Group for detailed consideration and advice.

Outcome of ITU-R's Working Party 5B meeting of November 2012

4.5 The Sub-Committee decided to refer the relevant issues (COMSAR 17/4/2, paragraphs 19 to 27) to the Technical Working Group for consideration when considering and finalizing the Preliminary draft IMO position on WRC-15 agenda items.

Provisions relating to Earth Stations located on board vessels

4.6 The Sub-Committee considered document COMSAR 17/4/1 (United States) related to earth stations located on board vessels (ESVs) and noted that the needs of shipping should be taken into account when reconsidering the regulatory limits of the use of Ku- and C-band ESVs, in preparation of and at WRC15.

4.7 After a brief discussion, the Sub-Committee decided to refer the document to the Technical Working Group for detailed consideration and the preparation of a liaison statement to ITU.

WRC-15 agenda item 1.16

Necessity for additional frequencies for AIS

4.8 The Sub-Committee, having considered the information provided by Japan (COMSAR 17/4/3) on the necessity for additional frequencies for AIS and inviting the Sub-Committee to encourage other AIS authorities of Member Governments to submit the VDL situation in their country to ITU-R Working Party 5B, decided to refer the issue to the Technical Working Group for consideration when considering and finalising the Preliminary draft IMO position on WRC-15 agenda items.

A satellite VDE segment as part of the future VHF Data Exchange

4.9 The Sub-Committee noted with appreciation the information provided by ESA (COMSAR 17/INF.7) regarding a possible satellite VDE downlink complement as part of the emerging VDE (VHF Data Exchange) discussed within WRC-15, agenda item 1.16.

Instructions for the Technical Working Group

4.10 The Sub-Committee instructed the Technical Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider document COMSAR 17/4 (Secretariat), paragraphs 58 to 97 and appendices 2 and 3 of the annex, and

.1 provide advice regarding the consequences and action to be taken following the amendments made by WRC-12 to resolution 349 (Rev.WRC-12), the result of which is that it is now no longer in line with IMO's guidance on this matter as provided in resolution A.814(19) (COMSAR 17/4, paragraph 2.3);

.2 consider and finalize the draft COMSAR circular on *Guidance on the validity of radiocommunications equipment installed and used on ships* (COMSAR 17/4, paragraph 2.4 and appendix 2);

.3 consider and finalize the Preliminary draft IMO position on WRC-15 agenda items concerning matters relating to maritime services, taking into account the relevant parts of document COMSAR 17/4/2 and COMSAR 17/4/3, and prepare relevant liaison statements to responsible groups in ITU-R, as appropriate (COMSAR 17/4, paragraphs 2.5 and appendix 3);

.4 consider the need to instruct the ICAO/IMO Joint Working Group on SAR to consider the matter of broadband public protection and disaster relief (PPDR) in relation to the development of a draft IMO position on WRC-15, agenda item 1.3 and to provide appropriate advice (COMSAR 17/4, paragraphs 2.6);

.5 advise on the need for holding the 9th meeting of the Joint IMO/ITU Experts Group, provisionally scheduled to take place from 14 to 18 October 2013, at IMO Headquarters in London and on its terms of reference (COMSAR 17/4, paragraphs 2.8);

.6 consider the schedule to prepare for WRC-15 and advise on the arrangements needed, in order to meet the deadlines for the preparation of WRC-15 (COMSAR 17/4, paragraphs 2.7); and

.2 consider document COMSAR 17/4/1 (United States) regarding WRC 15, agenda item 1.8, on the review of the provisions relating to earth stations located on board vessels, and prepare a liaison statement to ITU,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

4.11 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, section 4), the Sub-Committee took action as summarized in the ensuing paragraphs.

4.12 The Sub-Committee instructed the ICAO/IMO Joint Working Group to consider:

.1 the difficulty of switching off the EPIRB for a user, and the preferred cancellation procedure in case of an accidentally activated EPIRB; and

.2 in relation to the preparation of the draft IMO position on relevant agenda items for WRC-15, the matter of broadband public protection and disaster relief (PPDR).

4.13 The Sub-Committee endorsed:

.1 the draft MSC circular on *Guidance on the validity of radiocommunications equipment installed and used on ships*, as set out in annex 4, and invited the Committee to approve it; and

.2 the holding of the ninth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters at IMO Headquarters in London, from 14 to 18 October 2013, the terms of reference set out in COMSAR 17/WP.4, annex 8, and invited the Committee to authorize this intersessional meeting.

4.14 In order to meet the WRC-15 deadlines, the Sub-Committee invited the Committee to authorize the holding of a meeting of the Joint IMO/ITU Experts Group in 2014 and to instruct the Secretariat to schedule the meeting for September 2014, or, if the schedule of Sub-Committee meetings so required, earlier in the year, before the last relevant meeting of ITU-R WP5B in May 2014.

4.15 The Sub-Committee approved the preliminary draft IMO position on WRC-15, as set out in COMSAR 17/WP.4, annex 5, with a view to further developing it at the next meeting of the Joint IMO/ITU Experts Group.

4.16 The Sub-Committee approved:

.1 the draft liaison statement to ITU-R WP 5A, 5B, 5D and Joint Task Group 4-5-6-7 on WRC-15, Agenda item 1.1, regarding "IMO's concerns in relation to the wide range of frequency bands identified by ITU-R for future assessment of the suitability for IMT", as set out in annex 5; and

.2 the draft liaison statement to ITU-R WP 4A and CIRM on WRC-15, Agenda item 1.8, regarding "Broadband satellite earth stations aboard vessels (ESV)", as set out in annex 6,

and instructed the Secretariat to send these liaison statements to ITU, and to ITU and CIRM, respectively, and invited the Committee to endorse this action.

5 CONSIDERATION OF DEVELOPMENTS IN INMARSAT AND COSPAS-SARSAT

COSPAS-SARSAT SERVICES

5.1 The Sub-Committee briefly considered document COMSAR 17/5 (Cospas-Sarsat) containing a liaison statement from Cospas-Sarsat to IMO and ICAO, with regard to non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs. The Sub-Committee acknowledged the need to solve the problem and referred the issue to the SAR Working Group, for detailed consideration and advice.

5.2 The Sub-Committee further considered document COMSAR 17/5/2 (Cospas-Sarsat) highlighting work within the International Cospas-Sarsat Programme during the past year related to system enhancements, particularly specifications for next generation ("second generation") beacons and MEOSAR development, and the results of Cospas-Sarsat discussions on other matters of interest to the Sub-Committee.

5.3 During the ensuing discussions regarding the beacon coding system, the Sub-Committee noted that:

.1 not all the advantages and disadvantages of the newly developed system had been worked out by Cospas-Sarsat and that the matter had not matured sufficiently to be considered by the Sub-Committee; and

.2 experience with the current coding scheme was satisfactory and should be continued within the existing system.

5.4 The Sub-Committee decided to refer the issues mentioned in document COMSAR 17/5/2 to the SAR Working Group, for detailed consideration and advice and to discuss matters related to the future implementation of type-2 acknowledgements, type-2 messaging and beacon manipulation under agenda item 6 (paragraph 6.27 refers).

5.5 The Sub-Committee noted with appreciation a status report on the Cospas-Sarsat System (COMSAR 17/5/3), including System operations, space and ground segments, beacons, false alerts and results of MCC-SPOC communication tests.

Review of performance standards for EPIRBs

5.6 The Sub-Committee considered the proposal by the United States (COMSAR 17/5/4) for it to consider reviewing the performance standards for 406 MHz EPIRBs (resolution A.810(19)) and provide advice to Cospas-Sarsat as it continues to finalize requirements of the second-generation distress beacon.

5.7 In this context, the Sub-Committee recalled that it had recently had a work programme item on "Revision of Performance Standards for float-free satellite EPIRBs operating on 406 MHz (resolution A.810(19))" and that the views, as expressed at COMSAR 14 and COMSAR 15, were too far apart to enable an agreement for revised performance standards for 406 MHz EPIRBs to be reached in the foreseeable future.

5.8 The Cospas-Sarsat observer explained that the operational requirements for the second-generation beacons were developed to meet the existing IMO and ICAO standards and that it was expected that manufacturers would soon start to produce the beacons in order to bring them into operation from 2015. Furthermore, manufacturers could take any additional guidance from the Organization into account at the development stage.

5.9 Noting that the revision of resolution A.810(19) would require a new unplanned output and that the main concern was to consider issues affecting the battery life of EPIRBs, the Sub-Committee decided to instruct the SAR Working Group to consider the development of a recommendation on those issues, with the aim of advising Cospas-Sarsat on this specific matter to assist them in developing the second generation 406 MHz distress beacon requirements.

INMARSAT SERVICES

5.10 The Sub-Committee noted with appreciation the IMSO analysis and assessment (COMSAR 17/5/1) of the performance by Inmarsat Global Limited of that company's obligations for the provision of maritime services within the GMDSS, as overseen by IMSO for the period from 1 November 2011 to 31 October 2012. The Sub-Committee agreed that, during this period, Inmarsat had continued to provide sufficient quality of service to meet its obligations under the GMDSS.

The Inmarsat Maritime Safety Voice Service on FleetBroadband 500

5.11 The Sub-Committee noted with appreciation the information provided by Australia et al. (COMSAR 17/INF.8) on the Inmarsat Maritime Safety Voice Service which provided voice communications with distress, urgency, safety and routine priorities on FleetBroadband FB500.

ESTABLISHMENT OF THE SAR WORKING GROUP

5.12 The Sub-Committee established the SAR Working Group under the chairmanship of Mr. Nigel Clifford (New Zealand) and instructed it, taking into account decisions of and comments and proposals made in the Plenary, to consider:

.1 document COMSAR 17/5 (Secretariat) concerning non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs and provide comments and advice, as appropriate;

.2 document COMSAR 17/5/2 (Cospas-Sarsat) and provide advice on issues of interest to SAR providers and beacon coding methods; and

.3 the development of a recommendation on issues affecting the battery life of EPIRBs, with the aim of advising Cospas-Sarsat on this specific matter to assist them in developing the second-generation 406 MHz distress beacon requirements, taking into account information contained in document COMSAR 17/5/4 (United States),

and submit its report on Thursday, 24 January 2013.

Report of the SAR Working Group

5.13 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 3), the Sub-Committee took action as summarized in the ensuing paragraphs.

5.14 The Sub-Committee invited:

.1 Member Governments to take note of the issue of non-original equipment batteries being sold for use in Cospas-Sarsat type-approved 406-MHz EPIRBs and potentially develop additional national measures to address the matter; and

.2 Cospas-Sarsat to explore engineering trade-offs which minimised energy expenditure and maximized battery service life.

5.15 The Sub-Committee encouraged Member Governments to make detailed input on beacon coding methods to the Cospas-Sarsat technical meetings.

5.16 The Sub-Committee endorsed the Group's recommendation that:

.1 a simplified beacon coding system for next generation beacons should include potential use of the country code, TAC number and a serial number as a beacon unique id, provided that provision was also made for transmission of the MMSI number; and

.2 any beacon coding system should provide reliable, accurate, timely and complete information to SAR authorities.

6 SEARCH AND RESCUE (SAR)

DEVELOPMENT OF GUIDELINES ON HARMONIZED AERONAUTICAL AND MARITIME SEARCH AND RESCUE PROCEDURES, INCLUDING SAR TRAINING MATTERS

6.1 The Sub-Committee noted that, as requested by COMSAR 16, MSC 90 had extended the target completion year for the planned output on "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2013.

Nineteenth session of the ICAO/IMO Joint Working Group on the Harmonization of Aeronautical and Maritime SAR

6.2 The Sub-Committee noted that, as agreed by COMSAR 16 and endorsed by MSC 90, the nineteenth session of the ICAO/IMO Joint Working Group (JWG) on the Harmonization of Aeronautical and Maritime Search and Rescue had been held in Hong Kong, China, from 10 to 14 September 2012.

6.3 The Sub-Committee briefly considered document COMSAR 17/6 (Secretariat), containing the report of the JWG and noted:

.1 the discussion on Distress Vessel Classification for First SAR Actions, "Vessel Triage" and Maritime SAR Mission Risk Survey System (for Vessel Accident) (section 3.4 of the annex);

.2 issues related to IMRF's conference on maritime mass rescue operations, held in Gothenburg, Sweden, from 3 to 5 June 2012 (section 4.2 of the annex);

.3 the discussion on Smartphone and Other Computer Device SAR Applications (section 4.5 of the annex);

.4 the follow-up with regard to the final report on the crash of Air France 447 on 1 June 2009 (section 5.1 of the annex);

.5 the information provided on the Operational Management System for the United Kingdom Coastguard Service MRCC system (section 5.2 of the annex); and

.6 issues related to developments in Cospas-Sarsat (sections 7.4 and 7.5 of the annex).

6.4 The Sub-Committee decided to refer the action items mentioned in paragraphs 2.1, 2.8, 2.9, 2.11, 2.18, 2.19, 2.23 and 2.24 of document COMSAR 17/6 to the SAR Working Group for detailed consideration**.**

6.5 The delegation of South Africa expressed the view that, taking into account the fact that, since its formation, SAR expertise had grown and spread in all the major regions of the world, the membership of the JWG would need to be reconsidered by the Committee. The implementation of Florence Conference resolution No.1 was part testimony of this achievement. In this context, South Africa was of the view that it was now appropriate to consider broadening the membership to include additional experts from countries of Africa whose experts were currently participating as observers in meetings of the JWG.

Full membership would allow Member Governments to budget for participation in future meetings.

Mass rescue operations

6.6 The Sub-Committee noted with appreciation the information provided by IMRF (COMSAR 17/INF.3) containing the report on the conclusions of an international conference on mass rescue at sea held near Gothenburg, Sweden, from 3 to 5 June 2012, and outlining how the IMRF project on mass rescue operations would proceed.

6.7 The Sub-Committee further noted with appreciation the information provided by the United States (COMSAR 17/INF.5) on initiatives related to mass rescue operations (MROs) and, in particular, the planned Black Swan offshore mass rescue exercise involving a passenger ship.

FURTHER DEVELOPMENT OF THE GLOBAL SAR PLAN FOR THE PROVISION OF MARITIME SAR SERVICES, INCLUDING PROCEDURES FOR ROUTEING DISTRESS INFORMATION IN THE GMDSS

Global SAR Plan

6.8 The Sub-Committee noted the information provided by the Secretariat on amendments to the Global SAR Plan as circulated by SAR.8/Circ.4 on 1 December 2012.

6.9 The Sub-Committee further noted that MSC 91 had approved COMSAR.1/Circ.55 on 'Guidance for entering and updating information on search and rescue into GISIS' and on how to get access to the information for operational use. Furthermore, the Sub-Committee also noted that access had been made available for Member Governments to enter and update information on SAR services directly into GISIS from 1 December 2012. Direct access to updated information on SAR services (on a "read-only" basis) had also been made available to interested parties, including the general public.

6.10 The Sub-Committee also noted that the SAR.8 circular would no longer be circulated. Accordingly, the Sub-Committee encouraged Member Governments to check the available information in GISIS and update the information, as appropriate.

Establishment of MRCCs in Central America

6.11 The Sub-Committee recalled the information provided at COMSAR 16 on the establishment of MRCCs in Central America (COMSAR 16/17, paragraphs 6.13 to 6.15).

6.12 The Sub-Committee noted that MSC 90 had agreed to move the technical co-operation project forward with the aim of establishing MRCCs in all seven countries and to establish a SAR organization for Central America in which the individual countries would cooperate with their neighbouring countries.

6.13 The Sub-Committee further noted that a second SAR regional meeting on the development of a multilateral agreement for the Central American region had been held in Managua, Nicaragua, from 22 to 26 October 2012.

Report on the Fourteenth Combined Antarctic Naval Patrol, 2011-2012

6.14 The Sub-Committee noted with appreciation the information provided by Argentina and Chile (COMSAR 17/6/1) on the activities of the fourteenth combined Antarctic naval patrol carried out during the southern hemisphere summer of 2011/2012 by Argentina and

Chile with the aim of enhancing maritime safety and environmental protection on the Antarctic continent.

The Arctic Council

6.15 The delegation of Norway informed the Sub-Committee that, after endorsement by all Member States of the Arctic Council, the Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic had taken effect on 19 January 2013. The agreement was between the eight Member States of the Arctic Council, namely Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. The agreement established a commitment to cooperate in rescue operations, including improved regional organization of search and rescue in the Arctic. Strengthening rescue cooperation was essential for optimal utilization of resources in this area, which is characterized by long distances and harsh climate.

Training courses delivered by the Malta Search and Rescue Training Centre

6.16 The delegation of Malta provided information on the training courses related to maritime search and rescue delivered by the Malta Search and Rescue Training Centre over the one-year period October 2011 to October 2012. A copy of their statement is provided in annex 14.

Report of the 9th Black Sea Conference on SAR and GMDSS

6.17 The delegation of Ukraine provided information on the outcome of the 9th Black Sea Conference on SAR and GMDSS, held in Odessa, Ukraine, on 25 and 26 September 2012. A copy of their statement is provided in annex 14.

Draft revision of SAR.7/Circ.10 – List of IMO documents and publications which should be held by a Maritime Rescue Coordination Centre (MRCC)

6.18 The Sub-Committee briefly considered document COMSAR 17/6/2 containing a proposed update of the list of IMO documents and publications which should be held by an MRCC, and referred the issue to the SAR Working Group for detailed consideration and preparation of the revised SAR.7 circular.

Alignment of MSC.1/Circ.1182 – Guide to Recovery Techniques

6.19 The Sub-Committee considered the proposal by Iceland and IMRF (COMSAR 17/6/3) on alignment of MSC.1/Circ.1182 with the "Guide to Recovery Techniques", in view of the adoption of new SOLAS regulation III/17.1, which required all ships to have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed by the Organization.

6.20 In this context, the Sub-Committee noted that MSC 91 had adopted new SOLAS regulation III/17.1 (resolution MSC.338(91)) and approved MSC.1/Circ.1447 on 'Guidelines for the development of plans and procedures for recovery of persons from the water'. The Sub-Committee further noted that these new Guidelines should be read in conjunction with the 'Guide to recovery techniques' (MSC.1/Circ.1182) and the revised 'Guide for cold water survival' (MSC.1/Circ.1185/Rev.1) approved by MSC 91.

6.21 After some discussion, the Sub-Committee agreed that it would be beneficial if a written proposal for editorial changes was provided for consideration by a Working Group. Accordingly, the Sub-Committee invited Iceland and IMRF to forward a proposal for editorial

changes on MSC.1/Circ.1182 to the next session of the JWG and instructed the JWG to consider the matter and provide advice for consideration by the next session of the Sub-Committee.

Instructions for the SAR Working Group

6.22 The Sub-Committee instructed the SAR Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider and advise regarding paragraphs 2.1, 2.8, 2.9, 2.11, 2.18 and 2.19 of document COMSAR 17/6, and in particular to consider:

.1 encouraging Member Governments to make SAR experts available to participate at meetings of ICAO regional offices;

.2 providing the Antarctic Treaty Consultative Meeting (ATCM) with advice on the way ahead for the ATCM to make best use of its one full day special working group on SAR on 23 May 2013;

.3 encouraging Member Governments to consider the ATCM request to "include relevant experts on SAR in addition to national Antarctic programme personnel in their delegations participating in the special working group" (section 3.3 of the annex);

.4 finalizing the draft COMSAR circular containing guidance on the use of the graph at figure N.14, as contained in appendix N of IAMSAR Manual, Volume II, for approval by MSC 92 with the aim of having it distributed at the same time that the 2013 edition of the IAMSAR Manual is published; and

.5 preparing advice for Cospas-Sarsat on IMO's view on the future implementation of type-2 acknowledgments, type-2 messaging and beacon manipulation, taking into account document COMSAR 17/5/2 and also the development of alternative RLS systems, as appropriate;

.2 consider document COMSAR 17/6/2, containing the proposed update of the list of IMO documents and publications which should be held by an MRCC and prepare the draft revised SAR.7 circular;

.3 provide proper justification should there be a need for extension of the target completion year of the biennial agenda item "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2014,

and submit its report on Thursday, 24 January 2013.

Report of the SAR Working Group

6.23 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 4), the Sub-Committee took action as summarized in the ensuing paragraphs.

6.24 The Sub-Committee requested Member Governments to make SAR experts available for participation at meetings of ICAO regional offices to promote the harmonization of maritime and aeronautical search and rescue.

6.25 The Sub-Committee encouraged Member Governments with SAR interests in the Antarctic region to include relevant SAR experts in their delegations attending sessions of the Antarctic Treaty Consultative Meeting (ATCM).

6.26 The Sub-Committee endorsed the draft COMSAR circular on guidance on the use of the graph in figure N.14, appendix N of IAMSAR Manual, Volume II, as set out in annex 7, and invited the Committee to approve it.

6.27 The Sub-Committee agreed to advise Cospas-Sarsat of IMO's view on the future implementation of type-2 acknowledgements, type-2 messaging and beacon manipulation as follows:

.1 the current proposals for type-2 acknowledgements (acknowledgements from the RCC to the beacon) were not supported;

.2 the current proposals for two-way messaging under the currently developed specifications were not supported;

.3 the current proposals to have functionality for manipulating Distress Beacon Operating Characteristics were not supported; and

.4 the exploration of two-way technology was found worthy of future detailed study.

6.28 The Sub-Committee instructed the Secretariat to:

.1 add a column to the SAR.7 circular showing the list of IMO documents and publications which should be held by an MRCC, stating where the documents were available and whether the documents were free to download or had to be purchased; and

.2 circulate SAR.7/Circ.11 on the list of IMO documents and publications which should be held by an MRCC and invited the Committee to endorse the action taken.

6.29 The Sub-Committee invited the Committee to extend the target completion year for the work programme item "Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters" to 2014.

7 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

7.1 The Sub-Committee recalled that COMSAR 7 had agreed that no submissions concerning performance standards for any radiocommunication equipment should be accepted and/or considered under this agenda item (COMSAR 7/23, paragraphs 11.5 and 11.6).

7.2 The Sub-Committee noted that, based on the request of COMSAR 16, the Committee had extended the target completion year for this item to 2013.

Man Overboard (MOB) and similar devices using AIS-SART technology

7.3 The Sub-Committee recalled that COMSAR 16 had considered the issue of developments in Man Overboard (MOB) and similar devices using AIS-SART technology (COMSAR 16/17, paragraphs 7.9 to 7.12 and 7.20 to 7.24) and noted that MSC 90 had requested NAV 58 to develop draft guidance to seafarers.

7.4 The Sub-Committee considered document COMSAR 17/7 (Secretariat) containing a draft SN circular prepared by NAV 58, providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices, for further consideration and finalization by the Sub-Committee.

7.5 The Sub-Committee further considered the information provided by the Secretariat (COMSAR 17/7/1) that NAV 58, in considering the information to be provided to seafarers in the aforementioned draft SN circular, was of the view that the development of further guidance material for Administrations would be of benefit, and therefore invited the Sub-Committee to consider the development of further guidance material for Administrations on the use of devices using AIS technology.

7.6 The delegation of Australia, supported by Sweden, expressed its concern regarding the advice, provided by MSC 91 to manufacturers, to affix product labels to the AIS-SART, EPIRB-AIS and AIS Man Overboard (MOB) equipment, indicating that these AIS devices must be regarded as location aids in emergency situations and not as distress alert systems. They were of the view that this could lead to confusion, in particular in the case of EPIRB-AIS.

7.7 In this context, the Sub-Committee noted that the ICAO/IMO Joint Working Group on SAR (JWG) had also considered the issue (COMSAR 17/6, paragraphs 4.4.1 to 4.4.7) and was of the view that advice and guidance should be developed and made available on search planning and coverage procedures and processes to be carried out, if required.

7.8 After some discussion, the Sub-Committee decided to refer the issue to the SAR Working Group, as well as the Technical Working Group.

Instructions for the SAR Working Group

7.9 The Sub-Committee instructed the SAR Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 as a matter of priority, consider documents COMSAR 17/7 and COMSAR 17/7/1 and provide, as soon as possible, the Technical Working Group with relevant advice from the SAR point of view; and

.2 consider the need for the development of advice and guidance on search planning and coverage procedures and processes to be carried out on receipt of reports of an AIS-SART, AIS Man Overboard (MOB) or EPIRB-AIS device and provide advice on this matter,

and submit its report on Thursday, 24 January 2013.

Report of the SAR Working Group

7.10 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.11 The Sub-Committee noted the advice given to the Technical Working Group regarding the finalization of the draft SN circular providing information on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices.

7.12 The Sub-Committee instructed the ICAO/IMO Joint Working Group to:

.1 develop detailed guidance for Administrations on how to respond to reports of an AIS-SART signal including search planning applications; and

.2 consider the issue of inappropriate use of currently available AIS-MOB devices, with a view to providing further clarification and recommendations for possible actions by Administrations.

Instructions for the Technical Working Group

7.13 The Sub-Committee instructed the Technical Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider documents COMSAR 17/7 and COMSAR 17/7/1 and, taking into account the advice to be provided by the SAR Working Group,

.1 finalize the draft SN.1 circular providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices; and

.2 consider the development of further guidance material for Administrations on the use of devices using AIS technology and provide advice on this matter,

and submit its report on Thursday, 24 January 2013.

Report of the Technical Working Group

7.14 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4, section 5), and taking into account the outcome of the SAR Working Group (COMSAR 17/WP.3, section 5), the Sub-Committee took action as summarized in the ensuing paragraphs.

7.15 The Sub-Committee endorsed the draft SN.1 circular providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices, as set out in annex 8, and invited the Committee to approve it.

7.16 The Sub-Committee invited Member Governments and international organizations to submit proposals on the development of further guidance material for Administrations on the use of devices using AIS technology to the next session of the Sub-Committee.

7.17 To improve the situation regarding the display symbol for AIS-SART, AIS Man Overboard and EPIRB-AIS devices, the Sub-Committee invited Member Governments and international organizations to submit proposals to NAV 59, under agenda item 7, or to the Correspondence Group established on this issue by NAV 58.

7.18 Recognizing that it was very important to consider developments in maritime radiocommunication systems and technology and that further proposals might be submitted, the Sub-Committee decided to invite the Committee to extend the target completion year for this item to 2014 when discussing its biennial agenda under agenda item 14.

8 DEVELOPMENT OF AMENDMENTS TO THE IAMSAR MANUAL

8.1 The Sub-Committee noted that MSC 90 had approved draft amendments to the IAMSAR Manual (MSC 90/28, paragraphs 8.20 and 8.21).

8.2 The Sub-Committee recalled that COMSAR 16 had noted that the ICAO/IMO Joint Working Group on SAR (JWG) had identified several issues which needed further work and would be amended for inclusion in the 2016 edition of the IAMSAR Manual, and noted that the JWG was in the process of preparing several amendments (COMSAR 17/6, paragraph 3.1.4 of the annex).

8.3 The Sub-Committee briefly considered the proposed amendments to IAMSAR Manual, Volume II, appendix B on Commercial Emergency Notification and Locating Devices (CENALD) message format and sample message (COMSAR 17/6, paragraphs 3.1.5 and 3.1.6 and appendix D of the annex) and decided to refer the issue to the SAR Working Group for detailed consideration and advice.

Instructions for the SAR Working Group

8.4 The Sub-Committee instructed the SAR Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider the draft proposed amendment to the IAMSAR Manual, as given in document COMSAR 17/6, appendix D for inclusion in the 2016 edition of the IAMSAR Manual;

.2 provide justification for holding the next session in 2013 of the ICAO/IMO Joint Working Group, prepare the draft provisional agenda and also review its terms of reference, taking into account appendix G of document COMSAR 17/6; and

.3 consider the schedule to finalize the amendments for the 2016 edition of the IAMSAR Manual and advise on the arrangements needed, in order to finalize them in time,

and submit its report on Thursday, 24 January 2013.

Report of the SAR Working Group

8.5 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3, section 6 and annexes 4 and 5), the Sub-Committee took action as summarized in the ensuing paragraph.

8.6 The Sub-Committee endorsed:

.1 the draft amendments to the IAMSAR Manual volume II, as set out in COMSAR 17/WP.3, annex 4, for approval by MSC 95 in 2015 and consequential inclusion in the 2016 edition of the IAMSAR Manual;

.2 the holding of the 20th session of the ICAO/IMO Joint Working Group, to be held in Amsterdam, the Netherlands, from 23 to 27 September 2013, along with the terms of reference and provisional agenda, as set out in COMSAR 17/WP.3, annex 5, and invited the Committee to authorize this intersessional meeting; and

.3 the SAR Working Group's view that, in order to finalize amendments for inclusion in the 2016 edition of the IAMSAR Manual, there was also a need for the holding of the 21st session of the ICAO/IMO Joint Working Group in 2014, and invited the Committee to also authorize this intersessional meeting and to instruct the Secretariat to schedule the meeting for September/October 2014, or if the schedule of Sub-Committee meetings so required, earlier in the year.

9 DEVELOPMENT OF MEASURES TO AVOID FALSE DISTRESS ALERTS

9.1 The Sub-Committee recalled that during discussions on the proposals sent to COMSAR 16 on this matter, delegations could not agree (COMSAR 16/17, section 9).

9.2 Noting that no proposals had been submitted to this session, the Sub-Committee, following the suggestion of COMSAR 16, concluded that these issues should be further considered, if required, under the existing agenda items on the development of e-navigation and the review of the GMDSS, as appropriate.

9.3 Noting that the work on this planned output had been completed, the Sub-Committee agreed to invite the Committee to delete this planned output when discussing its biennial agenda under agenda item 14.

10 DEVELOPMENT OF MEASURES TO PROTECT THE SAFETY OF PERSONS RESCUED AT SEA

10.1 The Sub-Committee recalled that COMSAR 16 had noted information provided by the Secretariat on the progress of the Group of interested parties working on the development of a draft regional arrangement (COMSAR 16/17, section 10).

10.2 The Sub-Committee noted the information provided by the Secretariat that the second formal regional meeting of the Group working on the development of a draft regional arrangement had been convened through Circular letter No.3254, and that representatives of the Governments of Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, the Syrian Arab Republic, Tunisia, Turkey and the United Kingdom had been invited. It was further noted that following a request for more time to be given for informal consultations between some Parties concerned, the meeting had been postponed.

10.3 The Sub-Committee also noted that bilateral consultations had continued and it was expected that the second regional meeting would be rescheduled in the near future.

10.4 Having noted the aforementioned information, the Sub-Committee, taking into account that the work on this matter was still ongoing, decided to invite the Committee to extend the target completion year for this planned output to 2014 when discussing its biennial agenda under agenda item 14.

11 DEVELOPMENT OF AN E-NAVIGATION STRATEGY IMPLEMENTATION PLAN

11.1 The Sub-Committee noted the outcome of STW 43 (STW 43/14, paragraphs 6.13 to 6.16), MSC 90 (MSC 90/28, paragraphs 10.10 to 10.12), NAV 58 (NAV 58/14, paragraphs 6.37 to 6.46) and MSC 91 (MSC 91/22, paragraph 12.10) in relation to e-navigation.

11.2 In this context, the Sub-Committee also noted that NAV 58, noting that the gap analysis had been completed, had approved the final list of gaps of e-navigation (NAV 58/14, annex 7) and endorsed the preliminary list of potential e-navigation solutions as work in progress (NAV 58/WP.6, annex 2). Furthermore, NAV 58 re-established the Correspondence Group on e-navigation under the terms of reference set out in paragraph 6.44 of document NAV 58/14.

11.3 The Sub-Committee considered documents COMSAR 17/11, COMSAR 17/11/1 and COMSAR 17/INF.6 (Norway) containing the report of the Correspondence Group on e-navigation and including the list of potential e-navigation solutions most relevant to communication and search and rescue aspects. The documents also contained information on the ongoing process of risk and cost-benefit assessments, the results of test beds in Singapore and the Arctic and the outcome of two workshops related to e-navigation.

11.4 In this context, the Sub-Committee noted:

.1 the ongoing process of risk and cost-benefit assessment for e-navigation;

.2 that a test bed had been satisfactorily conducted in Singapore to demonstrate the use of the IHO S-100 standard to promulgate Maritime Safety Information (MSI); and

.3 the comments and observations related to information exchange and communications in the polar and other remote regions, including the possibility of routeing e-navigation information through existing LRIT Data Centres (DCs) to facilitate the exchange of information between Administrations and different shore-based stakeholders.

11.5 The Sub-Committee expressed general appreciation for the work carried out by the Correspondence Group on e-navigation, in particular with respect to the ongoing preparation of the final list of e-navigation solutions, the identification of risk control options and the feasibility evaluation process, including the cost-benefit analysis.

11.6 Some delegations supported the idea of exploring the use of the existing LRIT shore-based infrastructure (not the ship side) to facilitate the exchange of certain e-navigation information in the future, thereby leveraging its current implementation. Other delegations were of the view that the Sub-Committee should proceed with caution and that careful consideration should be given to technical, financial and legal aspects to avoid adversely affecting the normal functioning of the LRIT system by adding new functionalities to existing established DCs.

11.7 Following discussion, the Sub-Committee decided to refer documents COMSAR 17/11, COMSAR 17/11/1 and COMSAR 17/INF.6 to the Working Group on e-navigation and LRIT for comments and advice, as appropriate, on the list of e-navigation solutions and on the possibility of further exploring the current LRIT shore-based infrastructure as a platform for the exchange of e-navigation information.

ESTABLISHMENT OF THE WORKING GROUP ON E-NAVIGATION AND LRIT

11.8 The Sub-Committee established the Working Group on e-navigation and LRIT under the Chairmanship of Dr. S. Ryan (Canada) and instructed it, taking into account decisions of, and comments and proposals made in the Plenary, to:

.1 consider document COMSAR 17/11/1 and provide comments, as appropriate, on the list of e-navigation solutions most relevant to the COMSAR Sub-Committee; and

.2 consider document COMSAR 17/11 and provide advice on the possibility of further exploring the current LRIT shore-based infrastructure as a platform for the exchange of e-navigation information between Administrations and different shore-based stakeholders, taking into account relevant information provided in document COMSAR 17/INF.6,

and submit its report on Thursday, 24 January 2013.

Report of the Working Group

11.9 On receipt of the report of the Working Group on e-navigation and LRIT (COMSAR 17/WP.5), the Sub-Committee noted the comments and observations of the group (paragraphs 4 to 11) related to e-navigation and requested the Correspondence Group on e-navigation to take them into account for the preparation of the final list of potential e-navigation solutions to be submitted to NAV 59, as well as during the cost-benefit and risk-analysis process.

12 CONSIDERATION OF LRIT-RELATED MATTERS

12.1 The Sub-Committee noted the outcome of MSC 90 (MSC 90/28, paragraphs 6.2 and 6.23) and MSC 91 (MSC 91/22, paragraphs 6.1 to 6.9) on LRIT-related matters.

Developments in relation to the operation of the LRIT system since COMSAR 16

12.2 The Sub-Committee noted the information provided by the Secretariat (COMSAR 17/12 and COMSAR 17/INF.2) relating to information communicated to the Organization by Governments; the status of establishment of LRIT Data Centres (DCs); the operation of the LRIT Data Distribution Plan (DDP) and the Information Distribution Facility (IDF); the renewal of Public-Key Infrastructure (PKI) certificates; and technical co-operation activities related to LRIT.

Audits of LRIT Data Centres and of the International LRIT Data Exchange

12.3 The Sub-Committee considered documents COMSAR 17/12/2/Rev.1, COMSAR 17/INF.4 and COMSAR 17/INF.4/Add.1 (IMSO) containing the summary audit reports of DCs audited during the period from 8 December 2011 until 16 November 2012. The Sub-Committee also considered document COMSAR 17/12/7 (IMSO) providing observations and recommendations relating to the performance of the LRIT system deriving from the audits carried out since COMSAR 16.

12.4 In this context, the Sub-Committee noted that:

.1 47 audits had been carried out during the above mentioned period, 14 of which were completed without the need to issue any observation or non-conformity notes;

.2 several observation and non-conformity notes had been issued as a result of identified diversions from the technical specifications for the LRIT system;

.3 two DCs had been issued with major non-conformity notes as a result of their constant and mistreated deviations from the requirements of the audit criteria;

.4 at the time of submission of the information, the performance review and audit of only one DC was not progressing; the audit of other DCs which had not been audited in the past, as reported by IMSO during COMSAR 16, had been completed or was in process of completion;

.5 many DCs had been found to be using the LRIT system status message (message type 11) incorrectly and not in accordance with the technical specifications for the LRIT system, including significant delays in their transmission;

.6 different interpretations and implementations in relation to the processing of coastal request messages had been observed which would need to be clarified to ensure common and standard implementation;

.7 the custom-coded solutions for geospatial calculations implemented by some DCs should be adjusted to be consistent with the industry-standard GIS tools; and

.8 several processing issues related to non-metropolitan territories and special administrative regions were unclear and should be clarified in a separate section within the technical specifications for the LRIT system.

12.5 After a brief discussion, the Sub-Committee decided to refer documents COMSAR 17/12/2/Rev.1, COMSAR 17/12/7, COMSAR 17/INF.4 and COMSAR 17/INF.4/Add.1 to the Working Group on e-navigation and LRIT for further consideration and advice, as appropriate, and preparation of a COMSAR circular summarizing the audits conducted by IMSO so far.

Access to the web interface of the LRIT Data Distribution Plan and information concerning authorized testing Application Service Providers

12.6 The Sub-Committee considered document COMSAR 17/12/1 (Secretariat) proposing to allow GISIS users to have partial read-only access to the LRIT Data Distribution Plan (DDP) and proposing changes to its web interface so as to include information related to authorized testing Application Service Providers (ASPs) and consequently to discontinue the publishing of revisions of MSC.1/Circ.1377 on 'List of application service providers authorized to conduct conformance tests' and issue LRIT Conformance test reports on behalf of the Administrations.

12.7 Some delegations supported the proposal of allowing GISIS users to have partial read-only access to the DDP module of GISIS, whilst others disagreed and recommended proceeding with caution to avoid disclosing confidential information to the general public. The proposal for the inclusion of information related to authorized testing ASPs in the web interface of the DDP received general support.

12.8 After some discussion, the Sub-Committee referred the document to the Working Group on e-navigation and LRIT for detailed consideration and further advice.

Draft MSC resolution on "Operation of the International LRIT Data Exchange after 2013"

12.9 The Sub-Committee recalled the decision of MSC 90 relating to the continuous operation of the IDE by the European Maritime Safety Agency (EMSA) and of its disaster recovery site by the United States beyond 2013, and having considered document COMSAR 17/12/3 (Secretariat) containing a draft MSC resolution on "Operation of the International LRIT Data Exchange after 2013", instructed the Working Group on e-navigation and LRIT to finalize the draft resolution with a view to approval by MSC 92.

Proposal for inclusion of NOA message information in the LRIT system

12.10 The Sub-Committee considered document COMSAR 17/12/4 (Brazil) proposing the inclusion of Notice of Arrival (NOA) information in the LRIT system in order to facilitate and increase the use of the system by port States.

12.11 During the consideration of the proposal, views were equally divided. Some delegations supported the proposal and were of the view that it could increase the use of the system, in particular by port States willing to track ships using LRIT after receiving the NOA. Other delegations stated that the proposal was outside the purview of the LRIT system and its implementation could entail amendments to the existing SOLAS regulation V/19-1 including cost and legal implications, and could place an additional burden on Administrations. The view was also expressed that this was a policy issue and should be considered by the Committee before the Sub-Committee could undertake this exercise.

12.12 In light of the foregoing, the delegation of Brazil advised the Sub-Committee that it would re-submit the proposal to the Committee for a policy decision and inclusion of a new unplanned output, as appropriate.

Proposal to solve the ghost terminal problem

12.13 The Sub-Committee considered document COMSAR 17/12/5 (China), proposing to develop a global LRIT terminal Inmarsat Mobile Number (IMN) inquiry tool for all DCs and Inmarsat Communication Service Providers (CSPs) as a solution to solve the ghost terminal problem.

12.14 The Sub-Committee expressed its appreciation to China for having considered the issue and having proposed a solution to solve the ghost terminal problem. However, a few delegations were of the view that they could not agree with the proposal as this was an issue that should be dealt with internally between Administrations and their respective DCs.

12.15 The Chinese delegation was of the view that in order to solve the ghost terminal problem it was necessary for Member States and the industry to further study and review the problem and share the findings thereof, so as to ensure maritime safety and security.

Proposed solutions to the issue of shipborne terminals not reporting as expected

12.16 The Sub-Committee noted with appreciation the information provided by China (COMSAR 17/12/6) on the issue of LRIT shipborne terminals not reporting as expected and, in particular,

.1 the experience of the China National LRIT Data Centre (NDC) in this matter; and

.2 the troubleshooting and reporting-resuming procedure introduced.

12.17 In this context, the Sub-Committee encouraged DCs to continue studying the issue of terminals' abnormal reports and sharing their experiences so as to improve the terminals' reporting rate.

Instructions for the Working Group on e-navigation and LRIT

12.18 The Sub-Committee instructed the Working Group on e-navigation and LRIT, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 consider documents COMSAR 17/12/2/Rev.1, COMSAR 17/INF.4, COMSAR 17/INF.4/Add.1 and COMSAR 17/12/7 (IMSO) and provide advice, as appropriate, regarding the audit reports, as well as the comments and recommendations provided by the LRIT Coordinator, and prepare a draft COMSAR circular summarizing the audits conducted by the LRIT Coordinator to date;

.2 consider document COMSAR 17/12/1 and provide advice on the proposed partial read-only access to the DDP module for other GISIS users, and the inclusion in the DDP of information related to authorized testing ASPs and the consequential proposed discontinuation of revisions of MSC.1/Circ.1377; and

.3 consider document COMSAR 17/12/3 and finalize the draft MSC resolution on "Operation of the International LRIT Data Exchange after 2013" for approval,

and submit its report on Thursday, 24 January 2013.

Report of the Working Group

12.19 On receipt of the report of the Working Group on e-navigation and LRIT (COMSAR 17/WP.5), the Sub-Committee took action as summarized in the ensuing paragraphs.

12.20 The Sub-Committee endorsed:

.1 a draft revised COMSAR.1/Circ.54 on *Audits of LRIT Data Centres and of the International LRIT Data Exchange conducted by the LRIT Coordinator*, as set out in annex 9, and invited the Committee to approve it for dissemination as COMSAR.1/Circ.54/Rev.1;

.2 the decisions and recommendations of the group related to the audit findings, comments and observations submitted by the LRIT Coordinator (COMSAR 17/WP.5, paragraphs 14 to 22); and

.3 the recommendations of the group related to the provision of read-only access to the web interface of the DDP for GISIS users from Member Governments and the inclusion of information related to authorized testing ASPs, and requested the Secretariat to implement the necessary changes

in the web interface of the DDP and discontinue the publishing of revised versions of MSC.1/Circ.1377, and invited the Committee to endorse this action (COMSAR 17/WP.5, paragraphs 23 to 26).

12.21 The Sub-Committee approved a draft MSC resolution on 'Operation of the International LRIT Data Exchange after 2013', as set out in annex 10, and invited the Committee to adopt it.

12.22 The Sub-Committee noted the information provided by the European Commission related to the operation of the IDE, including planned activities for 2013 (COMSAR 17/WP.5, paragraph 28).

13 DEVELOPMENT OF A MANDATORY CODE FOR SHIPS OPERATING IN POLAR WATERS

13.1 The Sub-Committee recalled that COMSAR 16 had considered the issue (COMSAR 16/17, paragraphs 16.11 to 16.13) and, noting that DE 57 was scheduled for eight weeks after COMSAR 17, had invited Member Governments and interested organizations to consider the matter in detail and submit comments and proposals to COMSAR 17.

13.2 The Sub-Committee further recalled that COMSAR 16 had agreed to invite the ICAO/IMO Joint Working Group and the Joint IMO/ITU Experts Group to consider the issue and noted that these groups had reported back to the Sub-Committee in documents COMSAR 17/6 and COMSAR 17/4, respectively.

13.3 The Sub-Committee considered views and the proposed edits to chapters 8 and 10 of the draft Polar Code provided by the United States (COMSAR 17/13).

13.4 During the ensuing discussions, the following views were expressed:

.1 The purpose and benefit of additional tracking requirements, in particular for survival craft, was not clear;

.2 No compelling need or justification for additional requirements for tracking had been established;

.3 With reference to paragraph 12.5 of the draft Polar Code, communication with RCCs was of great importance, such as the reporting of the planned voyage on entering polar waters;

.4 Discussing carriage requirements for different types of ships and survival craft was not in the purview of the COMSAR Sub-Committee, and the Sub-Committee should only provide advice to the DE Sub-Committee from a technical point of view; and

.5 The risk-based approach should be taken into account and general requirements should be the rule, with prescriptive requirements only when needed.

13.5 After an in-depth discussion, the Sub-Committee decided to refer specific issues to the SAR and Technical working groups, as set out in paragraphs 13.6 and 13.12, respectively, for them to provide their comments to the Plenary before entrusting it to a drafting group, to be established.

Instructions for the SAR Working Group

13.6 The Sub-Committee instructed the SAR Working Group, taking into account decisions of and comments and proposals made in the Plenary, to:

.1 provide advice on:

.1 an "expected maximum time to rescue", taking into account the existing guidance in MSC.1/Circ.1184 and whether there might be a need to make distinctions on certain matters between requirements applicable to voyages in the Arctic and Antarctic, respectively;

.2 the definition of the term "tracking";

.3 whether required tracking is warranted for the ship and survival craft;

.4 a requirement for the interval between transmissions of tracking devices; and

.5 the impact on SAR authorities of receiving and using tracking data.

Report of the SAR Working Group

13.7 On receipt of the report of the SAR Working Group (COMSAR 17/WP.3 section 7 and annex 6), the Sub-Committee took action as summarized in the ensuing paragraphs.

13.8 The Sub-Committee noted the description of the differences between tracking and locating systems.

13.9 The Sub-Committee further noted that there would be no need for an additional requirement for tracking, since the LRIT system was developed to function on a worldwide basis. However, noting that geostationary satellites were not covering the polar areas, the Technical Working Group was instructed to advise on the use of the LRIT system in the polar regions.

13.10 Having noted the advice provided by the SAR Working Group that all survival craft required locating systems that would allow the responding SAR assets to locate them during a distress situation, the Sub-Committee instructed the Technical Working Group to take equipment for locating into account when considering the equipment needed on each type of survival craft.

13.11 The Sub-Committee further agreed to instruct the drafting group, to be established, to take the comments of the SAR Working Group into account in its work.

Instructions for the Technical Working Group

13.12 Having considered the advice from the SAR Working Group (COMSAR 17/WP.3 section 7 and annex 6), the Sub-Committee instructed the Technical Working Group, taking into account the advice of the SAR Working Group and decisions of and comments and proposals made in the Plenary, to:

.1 provide advice on:

.1 the equipment needed, including equipment for locating, on each type of survival craft (additional to what is already required, taking into account hazards specific for polar regions), including the provisions laid down in paragraph 8.3.2.7, and with particular emphasis on requirements for passenger ships, taking into account the existing guidance in MSC.1/Circ.1184;

.2 the minimum design temperatures for all communication equipment intended to be used, taking into account that -30ºC ambient temperature could be surpassed (more extreme);

.3 the inclusion of the use of AIS in section 8.3.3, for example to report on specific issues such as persons on board;

.4 the use of the LRIT system in polar regions;

.5 the minimum time the equipment should continue to operate;

.6 paragraphs 8 and 9 of document COMSAR 17/13, and in particular if, and if so how, planned satellite systems not (yet) part of GMDSS might serve ships operating within Sea Area A4; and

.7 the proposed amendments to sections 10.2 and 10.3 of document COMSAR 17/13.

Report of the Technical Working Group

13.13 On receipt of the report of the Technical Working Group (COMSAR 17/WP.4 section 6 and annex 10), the Sub-Committee took action as summarized in the ensuing paragraphs.

13.14 The Sub-Committee agreed that the advice prepared by the Technical working group was not a final conclusion on the matters debated by the SAR and Technical working groups, and that its advice would be an input for further discussion and decisions by the DE Sub-Committee.

13.15 After a brief discussion, the Sub-Committee agreed that the drafting group should merge the advice from the SAR and Technical working groups to prepare consolidated advice for DE 57.

ESTABLISHMENT OF THE DRAFTING GROUP ON THE DEVELOPMENT OF A MANDATORY POLAR CODE

13.16 In light of the foregoing, the Sub-Committee established the drafting group on the development of a mandatory Polar Code under the chairmanship of Ms. Turid Stemre (Norway) and instructed it, taking into account decisions of and comments and proposals made in the Plenary, and those provided by the SAR and Technical Working Groups, to finalize a consolidated response to the DE Sub-Committee on the parts of the Polar Code under the purview of the Sub-Committee, and submit its report on Thursday, 24 January 2013.

Report of the Drafting Group

13.17 On receipt of the report of the drafting group (COMSAR 17/WP.6), the Sub-Committee endorsed the advice to be sent to the DE Sub-Committee, as set out in the annex to document COMSAR 17/WP.6, instructed the Secretariat to forward it to DE 57 for consideration and invited the Committee to endorse the action taken by the Sub-Committee.

13.18 The delegation of France mentioned that paragraph 8.3.3.4 of the draft Polar Code, regarding medical equipment, had not been examined by the drafting group. The Sub-Committee invited France to submit a proposal to DE 57 relating to this issue.

14 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR COMSAR 18

General

14.1 The Sub-Committee recalled that the Assembly, at its twenty-seventh session, had approved the six-year *Strategic plan for the Organization (resolution A.1032(27)) and the High-level Action Plan of the Organization and priorities for the 2012-2013 biennium* (resolution A.1038(27)).

14.2 The Sub-Committee noted that, with regard to the proposed restructuring of the sub-committees (COMSAR 17/2/1), it was still instructed to prepare its biennial and provisional agendas, bearing in mind that they were subject to change pending the decisions of MEPC 65, MSC 92 and C 110.

Biennial agenda, post-biennial agenda and provisional agenda for COMSAR 18

14.3 Taking into account the progress made at the session and the instruction of MSC 91, the Sub-Committee prepared its proposed biennial agenda for 2014-2015, including outputs on the Committee's post-biennial agenda that fall under the purview of the Sub-Committee, as appropriate (COMSAR 17/WP.2, annex 1), and the provisional agenda for COMSAR 18 (COMSAR 17/WP.2, annex 2), as set out in annexes 11 and 12, respectively, for consideration by MSC 92.

Arrangements for the next session

14.4 The Sub-Committee agreed to establish, at its next session, working groups on the following subjects:

.1 SAR;

.2 GMDSS, ITU and operational matters and performance standards; and

.3 e-navigation and LRIT.

14.5 The Sub-Committee also established a correspondence group on the Review of the GMDSS.

Status of planned outputs in the High-level Action Plan

14.6 The Sub-Committee, noting that the status of planned outputs would no longer be produced as part of a working paper during the session in order to avoid a duplication of work, invited MSC 92 to note the status of planned outputs, set out in annex 13.

Date of next session

14.7 The Sub-Committee noted the information provided by the Secretariat that the date of the next session would be announced in due course, pending the decisions by MEPC 65, MSC 92 and C 110 on the proposed sub-committee restructuring.

15 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2014

15.1 In light of the decisions of C 109 and MSC 91 regarding the potential sub-committee restructuring, the Sub-Committee did not elect a Chairman and Vice-Chairman for 2014.

16 ANY OTHER BUSINESS

16.1 The Sub-Committee noted that no submissions had been received for consideration under this agenda item.

Reform of the subsidiary bodies reporting to MSC

16.2 The Sub-Committee, having noted the information provided by the Secretariat regarding the discussions at MSC 91 on matters related to the review and reform of the Organization (C 109/D and MSC 91/22), was invited by the Secretary-General to comment on the implications and practicability of the proposed amalgamation of the NAV and COMSAR Sub-Committees into one new sub-committee (MSC 91/19/9). The proposed amalgamation was supported in principle by the majority of those who spoke, provided effectiveness and participation were not compromised. A clear preference was expressed to retain Search and Rescue (SAR) issues with Radiocommunications, due to their close relationship, and for SAR issues to be addressed annually within any new sub-committee, to ensure continuity. Some concern was expressed about the possible increased workload due to the amalgamation of work programmes in one sub-committee. The possible need to reconsider the Council's decision on the number of days of interpretation for plenary sessions and/or to schedule some longer (8-day) meetings, when necessary, was suggested. The possible option of making some items of work (e.g. e-navigation and revision of performance standards) free-standing was also proposed and the importance of the continuation of the ICAO/IMO Joint Working Group on SAR stressed.

16.3 The delegations of France and Spain noted that, during the discussion in the Plenary on this point, certain delegations had made proposals as to the future duration of the meetings of the new sub-committee and, in connection with this possible prolongation of sessions, the number of plenary sessions with interpretation appropriate for this Sub-Committee. They expressed the view it that it was not the task of the Sub-Committee to raise the general issue of "current policy on the provision of interpretation for plenary sessions" as mentioned in paragraph 16.2 above. They recalled the existing United Nations Joint Inspection Unit recommendations on this point ("Multilingualism in the United Nations system organizations: Status of Implementation" (JIU/REP/2011/4)), as set out in document C 109/12(b).

16.4 The Secretary-General informed the Sub-Committee that the views expressed would be taken into account in the preparation of the detailed proposal requested by MSC 91 for consideration at MEPC 65 and MSC 92.

Expressions of appreciation

16.5 The Sub-Committee expressed appreciation to the following delegates and observers who had recently relinquished their duties, retired or had been transferred to other duties or were about to be, for their invaluable contribution to its work, and wished them a long and happy retirement or, as the case might be, every success in their new duties:

- Mr Eamon Corry (Ireland) on retirement;
- Mr Eirik Bliksrud (Norway) on retirement;
- Mr Chris Wortham (United Kingdom) on retirement;
- Mr Christer Waldegren (Sweden) on retirement;
- Mr Henk Middelkoop (CIRM) on retirement;
- Mr. Sam Ryan (Canada) (on promotion);
- Capt. Gurpreet Singhota (Secretariat) (retirement).

17 ACTION REQUESTED OF THE COMMITTEE

17.1 The Maritime Safety Committee, at its ninety-second session, is invited to:

.1 endorse the action taken by the Sub-Committee to re-establish the Correspondence Group on the Review of the GMDSS under the coordination of the United States (paragraph 3.10);

.2 approve the draft revision of annex 7 to MSC.1/Circ.1382/Rev.1 and instruct the Secretariat to disseminate it as MSC.1/Circ.1382/Rev.2, after including the revised annex 7 (paragraph 3.14 and annex 1);

.3 approve the revised draft MSC circular on amendments to resolution A.705(17), as amended, on *Promulgation of Maritime Safety Information* and instruct the Secretariat to disseminate it as MSC.1/Circ.1287/Rev.1 (paragraph 3.20 and annex 2);

.4 approve the revised draft MSC circular on amendments to resolution A.706(17), as amended, on *World-Wide Navigational Warning Service* and instruct the Secretariat to disseminate it as MSC.1/Circ.1288/Rev.1 (paragraph 3.20 and annex 3);

.5 approve the draft MSC circular on *Guidance on the validity of radiocommunications equipment installed and used on ships* (paragraph 4.13.1 and annex 4);

.6 authorize the convening of the ninth meeting of the Joint IMO/ITU Experts Group, to be held at IMO Headquarters in London, from 14 to 18 October 2013 (paragraph 4.13.2);

.7 authorize the holding of a meeting of the Joint IMO/ITU Experts Group in 2014 and instruct the Secretariat to take action, as appropriate (paragraph 4.14);

.8 endorse the action taken by the Sub-Committee in instructing the Secretariat to convey liaison statements to ITU and CIRM, (paragraphs 4.16.1 and 4.16.2 and annexes 5 and 6);

.9 approve the draft COMSAR circular on guidance on the use of the graph in figure N.14, appendix N of IAMSAR Manual, Volume II (paragraph 6.26 and annex 7);

.10 endorse the action taken by the Sub-Committee to instruct the Secretariat to circulate SAR.7/Circ.11 on the list of IMO documents and publications which should be held by an MRCC (paragraph 6.28.2);

.11 approve the draft SN.1 circular providing information to seafarers on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices (paragraph 7.15 and annex 8);

.12 authorize the holding of the 20th session of the ICAO/IMO Joint Working Group, in Amsterdam, the Netherlands, from 23 to 27 September 2013 (paragraph 8.6.2);

.13 authorise the holding of the 21st session of the ICAO/IMO Joint Working Group in 2014 and instruct the Secretariat to take action, as appropriate (paragraph 8.6.3);

.14 approve the draft revised COMSAR.1/Circ.54 on *Audits of LRIT Data Centres and of the International LRIT Data Exchange conducted by the LRIT Coordinator* and instruct the Secretariat to disseminate it as COMSAR.1/Circ.54/Rev.1 (paragraph 12.20.1 and annex 9);

.15 endorse the action taken by the Sub-Committee to instruct the Secretariat to implement the necessary changes in the web interface of the DDP and to discontinue the publishing of revised versions of MSC.1/Circ.1377 (paragraph 12.20.3);

.16 adopt the draft MSC resolution on *Operation of the International LRIT Data Exchange after 2013* (paragraph 12.21 and annex 10);

.17 endorse the action taken by the Sub-Committee to forward the advice on the parts of the Polar Code under the purview of the Sub-Committee to DE 57 for consideration (paragraph 13.17); and

.18 approve the report in general.

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ANNEX 1

DRAFT REVISION OF ANNEX 7 TO MSC.1/CIRC.1382/REV.1

518 kHz NAVTEX Service

1 Does your Administration operate NAVTEX Service on 518 kHz? YES ☐ NO ☐ Is it operational now? YES ☐ NO ☐
If not operational now, indicate the date of operation in the following table.

2 Indicate details of NAVTEX stations.*

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna (1)	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation(2)

* Refer to resolution A.801(19). See appendix.

490 kHz NAVTEX Service

1 Does your Administration operate NAVTEX Service on 490 kHz? YES ☐ NO ☐ Is it operational now? YES ☐ NO ☐
If not operational now, indicate the date of operation in the following table.

2 Indicate details of NAVTEX stations.

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna (1)	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation(2)

4209.5 kHz NAVTEX Service

1 Does your Administration operate a 4209.5 kHz NAVTEX Service? YES ☐ NO ☐ Is it operational now? YES ☐ NO ☐
If not operational now, indicate the date of operation in the following table.

2 Indicate details of 4209.5 kHz NAVTEX stations.

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna (1)	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation(2)

(1) Position in Latitude and Longitude (degrees and minutes to two decimal places) using WGS 84 datum.
(2) Operational or planned and any short amplifying remark.

APPENDIX TO ANNEX 7

IMO resolution A.801(19), annex 4, paragraph 3

Criteria for use when providing a NAVTEX service

The ground-wave coverage may be determined for each coast station by reference to Recommendations ITU-R P.368-9 and P.372-10 for the performance of a system under the following conditions:

Frequency	–	518 kHz
Bandwidth	–	500 Hz
Propagation	–	ground wave
Time of day & Season	–	(Administration should determine time periods in accordance with NAVTEX time transmission table (NAVTEX Manual, figure 3) and seasons appropriate to their geographic area based on prevailing noise level.)

Transmitter power & Antenna efficiency

- (The range of a NAVTEX transmitter depends on the transmitter power and local propagation conditions. The actual range achieved should be adjusted to the minimum required for adequate reception in the NAVTEX area served, taking into account the needs of ships approaching from other areas. Experience has indicated that the required range of 250 to 400 nautical miles can generally be attained by transmitter power in the range between 100 and 1,000 W during daylight with a 60% reduction at night.)

- RF S/N in 500 Hz bandwidth - 8 dB (Bit error rate 1 x 10^{-2})

- Percentage of time - 90

Full coverage of NAVTEX service area should be verified by field strength measurements.

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ANNEX 2

DRAFT MSC CIRCULAR

AMENDMENTS TO RESOLUTION A.705(17) –

PROMULGATION OF MARITIME SAFETY INFORMATION

1 The Maritime Safety Committee, at its [ninety-second session (12 to 21 June 2013)], approved amendments to resolution A.705(17) – Promulgation of Maritime Safety Information, prepared by the Sub-Committee on Radiocommunications and Search and Rescue, at its seventeenth session (21 to 25 January 2013).

2 The revised text, set out in the annex to this circular, replaces the existing text of the annex to resolution A.705(17).

3 The Committee decided that the amendments should enter into force on [1 January 2015].

4 This circular revokes MSC/Circ.1287.

* * *

ANNEX

RECOMMENDATION ON THE PROMULGATION OF MARITIME SAFETY INFORMATION

1 INTRODUCTION

1.1 The purpose of this Recommendation is to set out the organization, standards and methods which should be used for the promulgation and reception of maritime safety information.

1.2 The maritime safety information service of the Global Maritime Distress and Safety System (GMDSS) is the internationally and nationally coordinated network of broadcasts containing information which is necessary for safe navigation, received in ships by equipment which automatically monitors the appropriate transmissions, displays information which is relevant to the ship and provides a print capability. This concept is illustrated in figure 1.

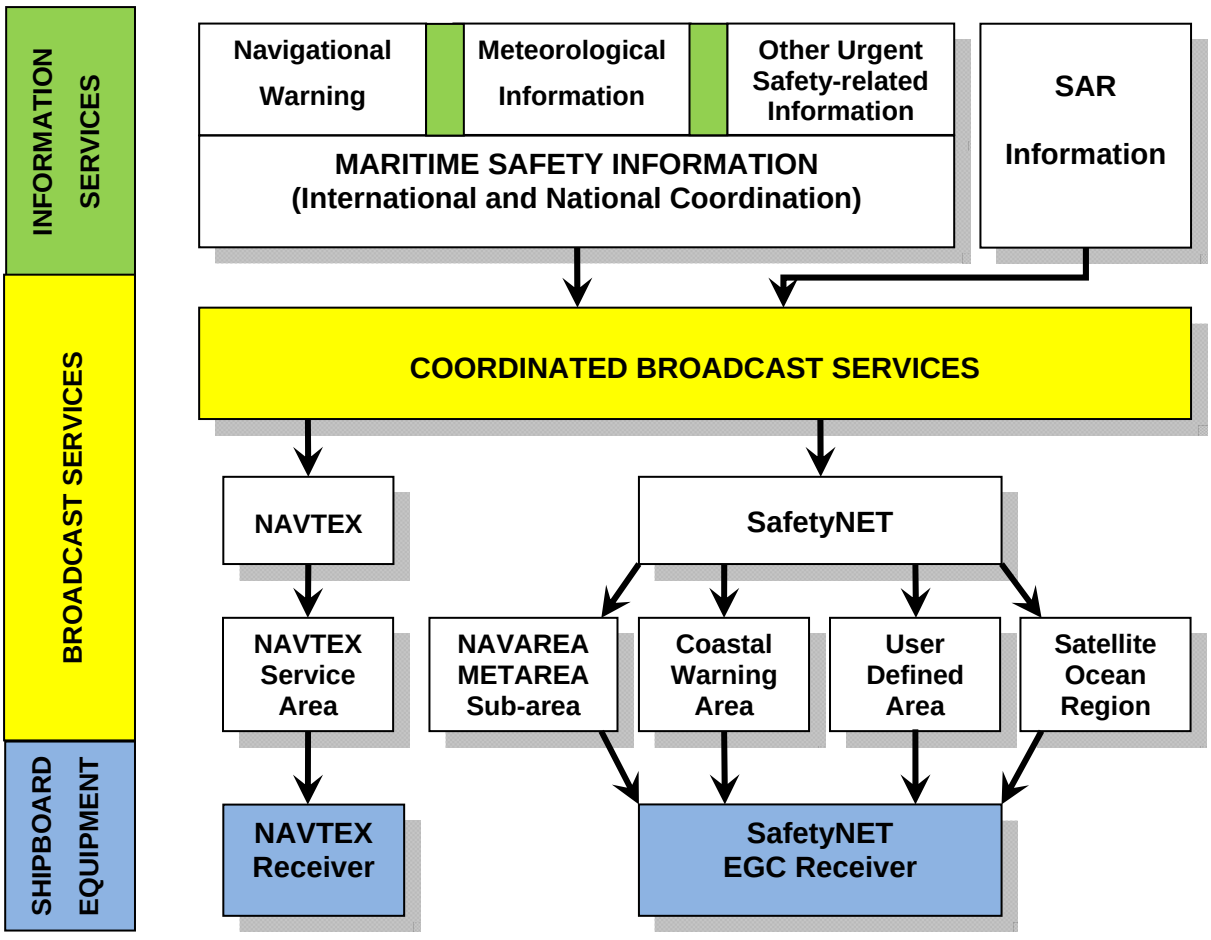

Figure 1 – The maritime safety information service of the Global Maritime Distress and Safety System

1.3 Maritime safety information is of vital concern to all ships. It is therefore essential that common standards are applied to the collection, editing and dissemination of this information. Only by doing so will the mariners be assured of receiving the information they need, in a form which they understand, at the earliest possible time.

2 DEFINITIONS

2.1 For the purposes of this Recommendation, the following definitions apply:

.1 *Coastal warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a National Coordinator. Broadcast should be made by the International NAVTEX service to defined NAVTEX service areas and/or by the International SafetyNET service to coastal warning areas. (In addition, Administrations may issue coastal warnings by other means).

.2 *Coastal warning area* means a unique and precisely defined sea area within a NAVAREA/METAREA or Sub-area established by a coastal State for the purpose of coordinating the broadcast of coastal maritime safety information through the SafetyNET service.

.3 *Global Maritime Distress and Safety System (GMDSS)* means the global communications service based upon automated systems, both satellite and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.

.4 *HF NBDP* means High Frequency narrow-band direct-printing, using radio telegraphy as defined in Recommendation ITU-R M.688, as amended.

.5 *In-force bulletin* means a list of serial numbers of those NAVAREA, Sub-area or coastal warnings in force issued and broadcast by the NAVAREA Coordinator, Sub-area Coordinator or National Coordinator.

.6 *International NAVTEX service* means the coordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language[1].

.7 *International SafetyNET service* means the coordinated broadcast and automatic reception of maritime safety information via the Inmarsat Enhanced Group Call (EGC) system, using the English language, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.8 *Maritime safety information (MSI)*[2] means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.

.9 *Maritime safety information service* means the internationally and nationally coordinated network of broadcasts containing information which is necessary for safe navigation.

.10 *METAREA* means a geographical sea area[3] established for the purpose of coordinating the broadcast of marine meteorological information. The term METAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

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1 As set out in the IMO NAVTEX Manual.

2 As defined in regulation IV/2 of the 1974 SOLAS Convention, as amended.

3 Which may include inland seas, lakes and waterways navigable by seagoing ships.

.11 *Meteorological information* means the marine meteorological warning and forecast information in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.12 *National NAVTEX service* means the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy using frequencies other than 518 kHz and languages as decided by the Administration concerned.

.13 *National SafetyNET service* means the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system, using languages as decided by the Administration concerned.

.14 *NAVAREA* means a geographical sea area[3] established for the purpose of coordinating the broadcast of navigational warnings. The term NAVAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.15 *Navigational warning* means a message containing urgent information relevant to safe navigation broadcast to ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.16 *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.

.17 *NAVTEX coverage area* means an area defined by an arc of a circle having a radius from the transmitter calculated according to the method and criteria given in resolution A.801(19), annex 4.

.18 *NAVTEX service area* means a unique and precisely defined sea area, wholly contained within the NAVTEX coverage area, for which maritime safety information is provided from a particular NAVTEX transmitter. It is normally defined by a line that takes full account of local propagation conditions and the character and volume of information and maritime traffic patterns in the region, as given in resolution A.801(19), annex 4.

.19 *Other urgent safety-related information* means maritime safety information broadcast to ships that is not defined as a navigational warning or meteorological information. This may include, but is not limited to, significant malfunctions or changes to maritime communications systems, and new or amended mandatory ship reporting systems or maritime regulations affecting ships at sea.

.20 *SafetyNET* means the international service for the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system. SafetyNET receiving capability is part of the mandatory equipment which is required to be carried by certain ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

[3] Which may include inland seas, lakes and waterways navigable by seagoing ships.

.21 *SAR information* means distress alert relays and other urgent search and rescue information broadcast to ships.

.22 *Sub-area* means a subdivision of a NAVAREA/METAREA in which a number of countries have established a coordinated system for the promulgation of maritime safety information. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.23 *User defined area* means a temporary geographic area, either circular or rectangular, to which maritime safety information is addressed.

.24 *World-Wide Navigational Warning Service (WWNWS)*[4] means the internationally and nationally coordinated service for the promulgation of navigational warnings.

.25 In the operating procedures *coordination* means that the allocation of the time for data *broadcast* is centralized, the format and criteria of data transmissions are compliant as described in the Joint IMO/IHO/WMO Manual on Maritime Safety Information and that all services are managed as set out in resolutions A.705(17), as amended, A.706(17), as amended, and A.1051(27).

3 BROADCAST METHODS

3.1 Two principal methods are used for broadcasting maritime safety information in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended, in the areas covered by these methods, as follows:

.1 NAVTEX: broadcasts to coastal waters; and

.2 SafetyNET: broadcasts which cover all the waters of the globe except for Sea Area A4, as defined by resolution A.801(19), annex 3, as amended.

3.2 Information should be provided for unique and precisely defined sea areas, each being served only by the most appropriate of the above methods. Although there will be some duplication to allow a ship to change from one method to another, the majority of warnings will be broadcast either on NAVTEX or SafetyNET.

3.3 NAVTEX broadcasts should be made in accordance with the standards and procedures set out in the NAVTEX Manual.

3.4 SafetyNET broadcasts should be made in accordance with the standards and procedures set out in the International SafetyNET Manual.

3.5 HF NBDP may be used to promulgate maritime safety information in areas outside Inmarsat coverage (SOLAS regulation IV/7.1.5).

3.6 In addition, Administrations may also provide maritime safety information by other means.

[4] As set out in resolution A.706(17), as amended.

3.7 In the event of failure of normal transmission facilities, an alternative means of transmission should be utilized. A NAVAREA warning and a coastal warning, if possible, should be issued detailing the failure, its duration and, if known, the alternative route for the dissemination of MSI.

4 SHIPBOARD EQUIPMENT

4.1 Ships are required to be capable of receiving maritime safety information broadcasts for the area in which they operate in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

4.2 The NAVTEX receiver should operate in accordance with the technical specifications set out in Recommendation ITU-R M.540, as amended. Resolution MSC.148(77) recommends Governments to ensure that NAVTEX receiver equipment, if installed on or after 1 July 2005, conforms to performance standards not inferior to those specified in resolution MSC.148(77), and if installed before 1 July 2005, conforms to performance standards not inferior to those specified in the annex to resolution A.525(13).

4.3 The SafetyNET receiver should conform to the Maritime Design and Installation Guidelines (DIGs), annex B, issue 6 of April 2008 published by Inmarsat. Resolution MSC.306(87) recommends Governments to ensure that EGC equipment, if installed on or after 1 July 2012, conforms to performance standards not inferior to those specified in the annex to resolution MSC.306(87), and if installed before 1 July 2012, conforms to performance standards not inferior to those specified in the annex to resolution A.664(16).

4.4 In sea area A4, outside of the coverage of NAVTEX, where MSI is received using HF NBDP, the HF NBDP receiver should operate in accordance with the technical specifications set out in Recommendation ITU-R M.688, as amended, and should meet the performance standards adopted by the Organization by resolution A.700(17), as amended.

5 PROVISION OF INFORMATION

5.1 Navigational warnings should be provided in accordance with the standards, organization and procedures of the WWNWS under the functional guidance of the International Hydrographic Organization (IHO) through its World-Wide Navigational Warning Service Sub-Committee (WWNWS).

5.2 Meteorological information should be provided in accordance with the World Meteorological Organization (WMO) technical regulations, recommendations, and procedures defined for the World-Wide Met-Ocean Information and Warning Service (WWMIWS) monitored and reviewed by the Expert Team on Maritime Safety Services of the Joint WMO/IOC[5] Commission for Oceanography and Marine Meteorology (JCOMM).

5.3 SAR information should be provided by the various authorities responsible for coordinating maritime search and rescue operations in accordance with the standards and procedures established by the Organization.

5.4 Other urgent safety-related information should be provided by the relevant national or international authority responsible for managing the system or scheme.

5.5 Relevant national or international authorities should take into account the need for contingency planning.

[5] IOC is the Intergovernmental Oceanographic Commission of UNESCO.

6 COORDINATION PROCEDURES

6.1 In order to make the best use of automated reception facilities, and to ensure that the mariner receives at least the minimum information necessary for safe navigation, careful coordination is required.

6.2 In general, this requirement for coordination will be met by the standard operational procedures of the Organization, IHO, WMO, International Telecommunication Union (ITU) and the International Mobile Satellite Organization (IMSO). Cases of difficulty should be referred, in the first instance, to the most appropriate parent body.

6.3 Administrations broadcasting maritime safety information should provide details of services to the Organization, which will maintain and publish this as part of the GMDSS Master Plan.

6.4 The coordination of changes to operational NAVTEX services and of the establishment of new stations is undertaken by the IMO NAVTEX Coordinating Panel on behalf of the Maritime Safety Committee.

6.5 The coordination of changes to operational SafetyNET services and of the authorization and registration of information providers is undertaken by the International SafetyNET Co-ordinating Panel on behalf of the Maritime Safety Committee.

6.6 Administrations should design their broadcasts to suit specific service areas. The designation of service areas is an important part of the coordination process since it is intended that a ship should be able to obtain all the information relevant to a given area from a single source. The Maritime Safety Committee approves NAVAREAs/METAREAs and service areas for the International NAVTEX and SafetyNET services as advised by the IHO and WMO.

7 IMO PROCEDURE FOR AMENDING THE MARITIME SAFETY INFORMATION SERVICE

7.1 Proposals for amendment or enhancement of the maritime safety information service should be submitted for evaluation by the appropriate Sub-Committee. Amendments will only be adopted after the approval of the Maritime Safety Committee.

7.2 The agreement of the IHO, WMO, IMSO and ITU, as appropriate, and the active participation of other bodies should be sought, according to the nature of the proposed amendments.

7.3 Amendments adopted by the Maritime Safety Committee will be notified to all concerned. At least 12 months' notice will be given before implementation and they will come into force on 1 January of the following year.

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ANNEX 3

DRAFT MSC CIRCULAR

AMENDMENTS TO RESOLUTION A.706(17) –

WORLD-WIDE NAVIGATIONAL WARNING SERVICE

1 The Maritime Safety Committee, at its [ninety-second session (12 to 21 June 2013)], approved amendments to annex 1, annex 2 and appendix of resolution A.706(17) – World-Wide Navigational Warning Service, prepared by the Sub-Committee on Radiocommunications and Search and Rescue, at its seventeenth session (21 to 25 January 2013).

2 The revised text, set out in this circular, replaces the existing text of annex 1, annex 2 and the appendix of resolution A.706(17).

3 The Committee decided that the amendments should enter into force on [1 January 2015].

4 This circular revokes MSC/Circ.1288.

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ANNEX 1

IMO/IHO WORLD-WIDE NAVIGATIONAL WARNING SERVICE GUIDANCE DOCUMENT

1 INTRODUCTION

1.1 The World-Wide Navigational Warning Service (WWNWS) is the internationally and nationally coordinated service for the promulgation of navigational warnings.

1.2 The purpose of this document is to provide specific guidance for the promulgation of internationally coordinated NAVAREA and coastal warnings. Its guidance does not apply to purely national warning services which supplement these internationally coordinated services.

1.3 The original resolution of the tenth International Hydrographic Conference in 1972 recommended the formation of an ad hoc joint IMO/IHO Commission to study the "establishment of a coordinated, efficient global radio navigational warning service". Subsequently, this became a purely IHO Commission known as the Commission on Promulgation of Radio Navigational Warnings, which in January 2009, became the IHO World Wide Navigational Warning Service Sub-Committee (WWNWS-SC) but nevertheless consults continuously with IMO. In its report to the eleventh International Hydrographic Conference in 1977, the Commission submitted a draft plan for the establishment of a World-Wide Navigational Warning System, also referred to as Plan for the Establishment of a coordinated Radio Navigational Warning Service. The title World-Wide Navigational Warning Service or WWNWS used for this revised edition of the document reflects the evolution of the system from a proposed action to an effective and fully operational coordinated service. This revised edition reflects the evolution of the WWNWS since the advent of the Global Maritime Distress and Safety System (GMDSS), as adopted by the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System in November 1988, effective on 1 February 1992.

1.4 Future amendments to this guidance document will be considered formally and approved by both IHO and IMO in accordance with the procedures set out in the annex. Proposed amendments must be evaluated by the IHO WWNWS-SC, which includes an ex-officio representative of the IMO Secretariat, prior to any extensive IHO or IMO consideration.

2 DEFINITIONS

2.1 For the purposes of the WWNWS, the following definitions apply:

.1 *Coastal warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a National Coordinator. Broadcast should be made by the International NAVTEX service to defined NAVTEX service areas and/or by the International SafetyNET service to coastal warning areas. (In addition, Administrations may issue coastal warnings by other means).

.2 *Coastal warning area* means a unique and precisely defined sea area within a NAVAREA/METAREA or Sub-area established by a coastal State for the purpose of coordinating the broadcast of coastal maritime safety information through the SafetyNET service.

.3 *Global Maritime Distress and Safety System (GMDSS)* means the global communications service based upon automated systems, both satellite and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.

.4 *HF NBDP* means High Frequency narrow-band direct-printing, using radio telegraphy as defined in Recommendation ITU-R M.688, as amended.

.5 *In-force bulletin* means a list of serial numbers of those NAVAREA, Sub-area or coastal warnings in force issued and broadcast by the NAVAREA Coordinator, Sub-area Coordinator or National Coordinator.

.6 *International NAVTEX service* means the coordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language[1]

.7 *International SafetyNET service* means the coordinated broadcast and automatic reception of maritime safety information via the Inmarsat Enhanced Group Call (EGC) system, using the English language, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.8 *Local warning* means a navigational warning which covers inshore waters, often within the limits of jurisdiction of a harbour or port authority.

.9 *Maritime safety information (MSI)*[2] means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.

.10 *Maritime safety information service* means the internationally and nationally coordinated network of broadcasts containing information which is necessary for safe navigation.

.11 *METAREA* means a geographical sea area[3] established for the purpose of coordinating the broadcast of marine meteorological information. The term METAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.12 *National Coordinator* means the national authority charged with collating and issuing coastal warnings within a national area of responsibility.

.13 *National NAVTEX service* means the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy using frequencies other than 518 kHz and languages as decided by the Administration concerned.

.14 *National SafetyNET service* means the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system, using languages as decided by the Administration concerned.

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1 As set out in the IMO NAVTEX Manual.

2 As defined in regulation IV/2 of the 1974 SOLAS Convention, as amended.

3 Which may include inland seas, lakes and waterways navigable by seagoing ships.

.15 *NAVAREA* means a geographical sea area[3] established for the purpose of coordinating the broadcast of navigational warnings. The term NAVAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.16 *NAVAREA Coordinator* means the authority charged with coordinating, collating and issuing NAVAREA warnings for a designated NAVAREA

.17 *NAVAREA warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a NAVAREA Coordinator.

.18 *Navigational warning* means a message containing urgent information relevant to safe navigation broadcast to ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.19 *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrow band direct-printing telegraphy.

.20 *NAVTEX Coordinator* means the authority charged with operating and managing one or more NAVTEX stations broadcasting maritime safety information as part of the International NAVTEX service.

.21 *NAVTEX coverage area* means an area defined by an arc of a circle having a radius from the transmitter calculated according to the method and criteria given in IMO resolution A.801(19) annex 4.

.22 *NAVTEX service area* means a unique and precisely defined sea area, wholly contained within the NAVTEX coverage area, for which maritime safety information is provided from a particular NAVTEX transmitter. It is normally defined by a line that takes full account of local propagation conditions and the character and volume of information and maritime traffic patterns in the region, as given in resolution A.801(19), annex 4.

.23 *Other urgent safety-related information* means maritime safety information broadcast to ships that is not defined as a navigational warning or meteorological information. This may include, but is not limited to, significant malfunctions or changes to maritime communications systems, and new or amended mandatory ship reporting systems or maritime regulations affecting ships at sea.

.24 *SafetyNET* means the international service for the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system. SafetyNET receiving capability is part of the mandatory equipment which is required to be carried by certain ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.

.25 *Sub-area* means a subdivision of a NAVAREA/METAREA in which a number of countries have established a coordinated system for the promulgation of navigational warnings. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.26 *Sub-area Coordinator* means the authority charged with coordinating, collating and issuing Sub-area warnings for a designated Sub-area.

.27 *Sub-area warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a Sub-area Coordinator. Broadcast should be made by the International NAVTEX service to defined NAVTEX service areas or by the International SafetyNET service (through the appropriate NAVAREA Coordinator).

.28 *User defined area* means a temporary geographic area, either circular or rectangular, to which maritime safety information is addressed.

.29 In the operating procedures *coordination* means that the allocation of the time for data broadcast is centralized, the format and criteria of data transmissions are compliant as described in the Joint IMO/IHO/WMO Manual on Maritime Safety Information and that all services are managed as set out in resolutions A.705(17), as amended, A.706(17), as amended and A.1051(27).

3 NAVIGATIONAL WARNING BROADCASTS

3.1 Methods

3.1.1 Two principal methods are used for broadcasting navigational warnings as part of MSI in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended, in the areas covered by these methods, as follows:

.1 NAVTEX: broadcasts to coastal waters; and

.2 SafetyNET: broadcasts which cover all the waters of the globe except for sea area A4, as defined by resolution A.801(19), annex 3, as amended.

3.1.2 Information should be provided for unique and precisely defined sea areas, each being served only by the most appropriate of the above methods. Although there will be some duplication to allow a ship to change from one method to another, the majority of warnings will be broadcast either on NAVTEX or SafetyNET.

3.1.3 NAVTEX broadcasts should be made in accordance with the standards and procedures set out in the NAVTEX Manual.

3.1.4 SafetyNET broadcasts should be made in accordance with the standards and procedures set out in the International SafetyNET Manual.

3.1.5 HF NBDP may be used to promulgate maritime safety information in areas outside Inmarsat coverage (SOLAS regulation IV/7.1.5).

3.1.6 In addition, Administrations may also provide navigational warnings by other means.

3.1.7 In the event of failure of normal transmission facilities, an alternative means of transmission should be utilized. A NAVAREA Warning and a coastal Warning, if possible, should be issued detailing the failure, its duration and, if known, the alternative route for the dissemination of MSI.

3.2 Scheduling

3.2.1 *Automated methods (NAVTEX/SafetyNET)*

3.2.1.1 Navigational warnings should be broadcast as soon as possible or as dictated by the nature and timing of the event. Normally, the initial broadcast should be made as follows:

.1 for NAVTEX, at the next scheduled broadcast, unless circumstances indicate the use of procedures for VITAL or IMPORTANT warnings; and

.2 for SafetyNET, within 30 minutes of receipt of original information, or at the next scheduled broadcast.

3.2.1.2 Navigational warnings should be repeated in scheduled broadcasts in accordance with the guidelines promulgated in the NAVTEX Manual and International SafetyNET Manual as appropriate.

3.2.1.3 At least two scheduled daily broadcast times are necessary to provide adequate promulgation of NAVAREA warnings. When NAVAREAs extend across more than six time zones, more than two broadcasts should be considered to ensure that warnings can be received. When using SafetyNET in lieu of NAVTEX for coastal warnings, Administrations may need to consider an increase in the number of scheduled daily broadcasts compared with the requirement for NAVAREA warnings.

3.2.2 *Schedule changes*

3.2.2.1 Broadcast times for NAVTEX are defined by the B1 transmitter identification character of the station, allocated by the IMO NAVTEX Coordinating Panel.

3.2.2.2 Times of scheduled broadcasts under the international SafetyNET service are coordinated through the International SafetyNET Coordinating Panel.

4 NAVIGATIONAL WARNINGS

4.1 General

4.1.1 There are four types of navigational warnings: NAVAREA warnings, Sub-area warnings, coastal warnings and local warnings. The WWNWS guidance and coordination are involved with only three of them:

.1 NAVAREA warnings;

.2 Sub-area warnings; and

.3 Coastal warnings.

4.1.2 Navigational warnings should remain in force until cancelled by the originating coordinator. Navigational warnings should be broadcast for as long as the information is valid; however, if they are readily available to mariners by other official means, for example in Notices to Mariners, then after a period of six weeks they may no longer be broadcast.

4.1.3 The minimum information in a navigational warning which a mariner requires is "hazard" and "position". It is usual, however, to include sufficient extra detail to allow some freedom of action in the vicinity of the hazard. This means that the message should give enough extra data for the mariners to be able to recognize the hazard and assess its effect upon their navigation.

4.1.4 If known, the duration of the event causing a navigational warning should be given in the text.

4.1.5 Some of the subjects for navigational warnings listed in paragraph 4.2.1.3 (e.g. drifting ice and tsunami warnings) may also be suitable for inclusion in METAREA forecasts or warnings. In this event, appropriate coordination between the relevant NAVAREA and METAREA Coordinators must occur.

4.2 The four types of navigational warnings are:

4.2.1 *NAVAREA warnings*

4.2.1.1 NAVAREA warnings are concerned with the information detailed below which oceangoing mariners require for their safe navigation. This includes, in particular, new navigational hazards and failures of important aids to navigation as well as information which may require changes to planned navigational routes.

4.2.1.2 Coastal warnings are broadcast by the International NAVTEX service, or by the International SafetyNET service when implemented in lieu of NAVTEX. They are not normally rebroadcast as NAVAREA warnings unless deemed of such significance that the mariner should be aware of them before entering a NAVTEX service area. The National Coordinator will evaluate the significance of the information for consideration as a NAVAREA warning while the NAVAREA Coordinator will make the final determination.

4.2.1.3 The following subjects are considered suitable for broadcast as NAVAREA warnings. This list is not exhaustive and should be regarded only as a guideline. Furthermore, it presupposes that sufficiently precise information about the item has not previously been disseminated in a Notice to Mariners:

.1 casualties to lights, fog signals, buoys and other aids to navigation affecting main shipping lanes;

.2 the presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking;

.3 establishment of major new aids to navigation or significant changes to existing ones, when such establishment or change might be misleading to shipping;

.4 the presence of large unwieldy tows in congested waters;

.5 drifting hazards (including derelict ships, ice, mines, containers, other large items over 6 metres in length, etc.);

.6 areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas);

.7 the presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their marking;

.8 unexpected alteration or suspension of established routes;

.9 cable or pipe-laying activities, the towing of large submerged objects for research or exploration purposes, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes;

.10 the establishment of research or scientific instruments in or near shipping lanes;

.11 the establishment of offshore structures in or near shipping lanes;

.12 significant malfunctioning of radionavigation services and shore-based maritime safety information radio or satellite services;

.13 information concerning events which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests, ordnance dumping zones, etc. It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible such warnings should be originated not less than five days in advance of the scheduled event and reference may be made to relevant national publications in the warning;

.14 acts of piracy and armed robbery against ships;

.15 tsunamis and other natural phenomena, such as abnormal changes to sea level;

.16 World Health Organization (WHO) health advisory information;

.17 security related requirements[4].

4.2.2 *Sub-area warnings*

4.2.2.1 Sub-area warnings broadcast information which is necessary for safe navigation within a Sub-area. They will normally include all subjects listed in 4.2.1.3 above, but will usually affect only the Sub-area.

4.2.3 *Coastal warnings*

4.2.3.1 Coastal warnings broadcast information which is necessary for safe navigation within areas seaward of the fairway buoy or pilot station, and should not be restricted to main shipping lanes. Where the area is served by NAVTEX, it should provide navigational warnings for the entire NAVTEX service area. Where the area is not served by NAVTEX, it is necessary to include all warnings relevant to the coastal waters up to 250 miles from the coast in the International SafetyNET service broadcast.

4.2.3.2 Coastal warnings should include at least the subjects in 4.2.1.3.

4.2.4 *Local warnings*

4.2.4.1 Local warnings broadcast information which cover inshore waters, often within the limits of jurisdiction of a harbour or port authority. They are broadcast by means other than NAVTEX or SafetyNET, and supplement coastal warnings by giving detailed information within inshore waters.

[4] In accordance with the requirements of the International Ship and Port Facility Security Code.

5 NAVIGATIONAL WARNING REQUIREMENTS

5.1 Guidance

5.1.1 Operational guidance for handling and formatting navigational warnings is given in the Joint IMO/IHO/WMO Manual on Maritime Safety Information, the NAVTEX Manual and the International SafetyNET Manual.

5.2 Numbering

5.2.1 Navigational warnings in each series should be consecutively numbered throughout the calendar year, commencing with 1/YY at 0000 UTC on 1 January.

5.2.2 Navigational warnings should be transmitted in reverse numerical order on scheduled broadcasts.

5.3 Language

5.3.1 All NAVAREA, Sub-area and coastal warnings should be broadcast only in English in the International NAVTEX and SafetyNET services.

5.3.2 In addition to the required broadcasts in English, NAVAREA, Sub-area and coastal warnings may be broadcast in a national language using national NAVTEX and SafetyNET services and/or other means.

5.3.3 Local warnings may be issued in the national language and/or in English.

5.4 "No warnings" message

5.4.1 When there are no navigational warnings to be disseminated at a scheduled broadcast time, a brief unnumbered message should be transmitted to identify the broadcast and advise the mariner that there is no navigational warning message traffic on hand.

6 COORDINATOR RESOURCES AND RESPONSIBILITIES

6.1 NAVAREA Coordinator resources

6.1.1 The NAVAREA Coordinator must have:

.1 the expertise and information sources of a well-established national hydrographic service;

.2 effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc. with Sub-area and National Coordinators in the NAVAREA, with other NAVAREA Coordinators, and with other data providers; and

.3 access to broadcast systems for transmission to the navigable waters of the NAVAREA. As a minimum, this should include those described in paragraph 3.1.1. Reception should normally be possible at least 300 nautical miles beyond the limit of the NAVAREA.

6.2 NAVAREA Coordinator responsibilities

6.2.1 The NAVAREA Coordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within the NAVAREA;

.2 assess all information immediately upon receipt for relevance to navigation in the NAVAREA;

.3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;

.4 draft NAVAREA warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;

.5 direct and control the broadcast of NAVAREA warnings, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;

.6 forward NAVAREA warnings and relevant associated information which may require wider promulgation directly to adjacent NAVAREA Coordinators and/or others as appropriate, using the quickest possible means;

.7 ensure that NAVAREA warnings which remain in force for more than six weeks are made available immediately to NAVAREA Coordinators, other authorities and mariners in general, as appropriate;

.8 ensure that information concerning all navigational warning subject areas listed in paragraph 4.2.1.3 that may not require a NAVAREA warning within their own NAVAREA is forwarded immediately to the appropriate National and NAVAREA Coordinators affected by the event;

.9 broadcast in-force bulletins not less than once per week at a regular scheduled time;

.10 promulgate the cancellation of NAVAREA warnings which are no longer valid;

.11 act as the central point of contact on matters relating to navigational warnings within the NAVAREA;

.12 promote and oversee the use of established international standards and practices in the promulgation of navigational warnings throughout the NAVAREA;

.13 when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s);

.14 when notified by the appropriate authorities, arrange for the broadcast of suitable NAVAREA warnings to promulgate World Health Organization (WHO) health advisories, tsunami-related warnings, and other information which is necessary for safe navigation.

.15 monitor the broadcasts which they originate, to ensure that the warnings have been correctly broadcast;

.16 maintain records of source data relating to NAVAREA warnings in accordance with the requirement of the National Administration of the NAVAREA Coordinator;

.17 coordinate preliminary discussions between neighbouring Member States, seeking to establish or amend NAVTEX services, and with other adjacent Administrations, prior to formal application;

.18 contribute to the development of international standards and practices through attendance and participation in the IHO World-Wide Navigational Warning Service Sub-Committee meetings, and also participate in relevant IMO, IHO and WMO fora as appropriate; and

.19 take into account the need for contingency planning.

6.3 Sub-area Coordinator resources

6.3.1 The Sub-area coordinator must have, or have access to:

.1 the expertise and information sources of a well-established national hydrographic service;

.2 effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc. with National Coordinators in the Sub-area, with the NAVAREA Coordinator, and with other data providers; and

.3 broadcast systems for transmission to the entire Sub-area.

6.4 Sub-area Coordinator responsibilities

6.4.1 The Sub-area Coordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within the Sub-area;

.2 assess all information immediately upon receipt for relevance to navigation in the Sub-area;

.3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;

.4 draft Sub-area warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;

.5 direct and control the broadcast of Sub-area warnings, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;

.6 forward Sub-area warnings and relevant associated information which may require wider promulgation directly to their own NAVAREA Coordinator using the quickest possible means;

.7 broadcast in-force bulletins not less than once per week at a regular scheduled time;

.8 promulgate the cancellation of Sub-area warnings which are no longer valid;

.9 act as the central point of contact on matters relating to navigational warnings within the Sub-area;

.10 promote the use of established international standards and practices in the promulgation of navigational warnings within the Sub-area;

.11 monitor the broadcasts which they originate to ensure that the warnings have been correctly broadcast;

.12 maintain records of source data relating to Sub-area warnings in accordance with the requirement of the National Administration of the Sub-area Coordinator;

.13 contribute to the development of international standards and practices through attendance and participation in the IHO World-Wide Navigational Warning Service Sub-Committee meetings, and also participate in relevant IMO, IHO and WMO fora as appropriate; and

.14 take into account the need for contingency planning.

6.5 National Coordinator resources

6.5.1 The National Coordinator must have:

.1 established sources of information relevant to the safety of navigation within national waters;

.2 effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc. with the NAVAREA/Sub-area Coordinator and adjacent National Coordinators; and

.3 access to broadcast systems for transmission to their area of national responsibility.

6.6 National Coordinator responsibilities

6.6.1 The National Coordinator must:

.1 endeavour to be informed of all events that could significantly affect the safety of navigation within their area of national responsibility;

.2 assess all information immediately upon receipt for relevance to navigation in their area of national responsibility;

.3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;

.4 draft coastal warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;

.5 direct and control the broadcast of coastal warnings, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;

.6 forward coastal warnings and relevant associated information which may require wider promulgation directly to their NAVAREA/Sub-area Coordinator and/or adjacent National Coordinators as appropriate, using the quickest possible means;

.7 broadcast in-force bulletins not less than once per week at a regular scheduled time;

.8 promulgate the cancellation of coastal warnings which are no longer valid;

.9 act as the central point of contact on matters relating to navigational warnings within their area of national responsibility;

.10 promote the use of established international standards and practices in the promulgation of navigational warnings within their area of national responsibility;

.11 monitor the broadcasts which they originate to ensure that the warnings have been correctly broadcast;

.12 maintain records of source data relating to coastal warnings in accordance with the requirement of the National Administration of the National Coordinator; and

.13 take into account the need for contingency planning.

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ANNEX 2

IMO PROCEDURE FOR AMENDING THE WORLD-WIDE NAVIGATION WARNING SERVICE

1 Proposals for amendment or enhancement of the World-Wide Navigational Warning Service must be submitted for evaluation by the appropriate Sub-Committee. Amendments will only be adopted after the approval of the Maritime Safety Committee (MSC).

2 Amendments to the service should normally be adopted at intervals of approximately two years or at such longer periods as may be determined by the Maritime Safety Committee. Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months' notification and will come into force on 1 January of the following year.

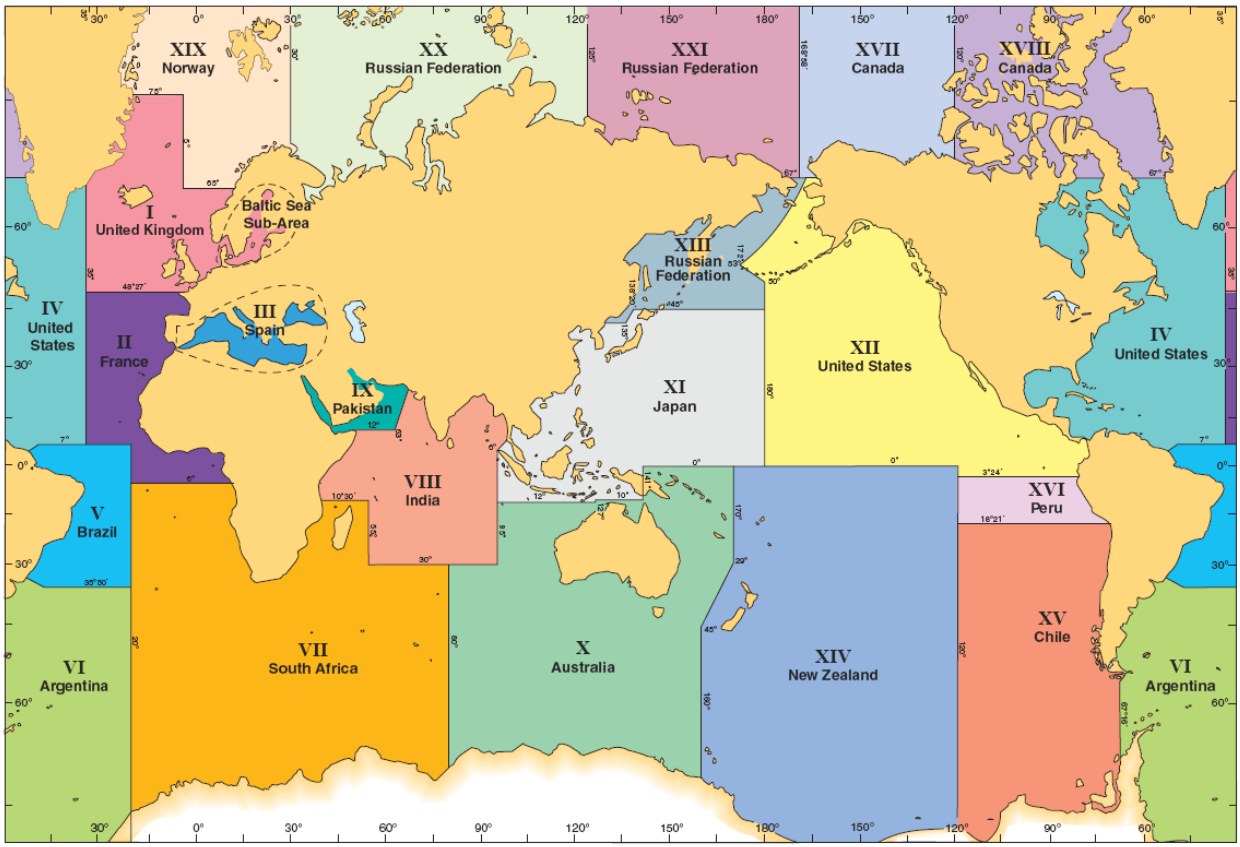
3 The agreement of the International Hydrographic Organization and the active participation of other bodies must be sought according to the nature of the proposed amendments.

4 The schedule of broadcast times and frequencies for the WWNWS, being subject to frequent changes, will not be subject to these amendment procedures, but must be coordinated through the International SafetyNET Coordinating Panel or the IMO NAVTEX Coordinating Panel, as appropriate.

* * *

Appendix

GEOGRAPHICAL AREAS FOR COORDINATING AND PROMULGATING NAVAREA WARNINGS



The delimitation of these NAVAREAs is not related to and shall not prejudice the delimitations of any boundaries between States.

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ANNEX 4

DRAFT MSC CIRCULAR

GUIDANCE ON THE VALIDITY OF RADIOCOMMUNICATIONS EQUIPMENT INSTALLED AND USED ON SHIPS

1 The Maritime Safety Committee at its [ninety-second session (12 to 21 June 2013)], taking into account the recommendation of the Sub-Committee on Radiocommunications and Search and Rescue at its seventeenth session (21 to 25 January 2013), having recognized concerns that incompatibility may exist between radiocommunication equipment installed on ships, and the revised frequencies and channelling arrangements for the maritime HF and VHF bands as contained in appendices 17 and 18 to the Radio Regulations (RR) – Edition 2012, approved this Guidance on the validity of radiocommunications equipment installed and used on ships.

2 The World Radiocommunication Conference 2012 made extensive changes to appendices 17 and 18 of the RR. Whilst these changes do not affect the GMDSS, they do affect the use of other frequencies that would be used by services such as Port Operations and VTS.

3 The RR provisions apply as from the dates of application indicated in article 59 and Resolution 98 of the RR. Timely action is required by ships to ensure that radiocommunication equipment complies with the RR. Replacement of operating hardware may be necessary to meet the changed requirements.

4 According to the performance standards for shipborne VHF radio installations capable of communication and digital selective calling (resolution A.803(19)) the equipment should comply with the Radio Regulations.

5 Attention is drawn to MSC.1/Circ.1389 which contains guidance on procedures for updating shipborne navigation and communication equipment, and that updates to application software and firmware to meet changes in IMO and ITU regulatory requirements were needed.

6 To ensure compliance to the RR, radiocommunication equipment should be updated so that following the first radio survey after 1 January 2017, radiocommunication equipment meets the channelling arrangements reflected in appendices 17 and 18 of the RR.

7 Ships which are not subject to radio surveys, should take due account of the date shown in paragraph 6.

8 Member Governments are invited to bring this information to the attention of the appropriate national authorities and all other parties concerned.

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ANNEX 5

LIAISON STATEMENT TO ITU-R WORKING PARTIES 5A, 5B, 5D AND JOINT TASK GROUP 4-5-6-7

WRC-15, AGENDA ITEM 1.1

IMO's concerns in relation to the wide range of frequency bands identified by ITU-R for future assessment of the suitability for IMT

1 IMO's Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its seventeenth session from 21 to 25 January 2013, further developed the "Preliminary draft IMO position on WRC-15 Agenda items concerning matters relating to maritime services", of which the first draft had already been made available for information in appendix 3 to Document 5A/140-E, Document 5B/99, Document 5D/197-E and Document JTG 4-5-6-7/51-E.

Frequency bands of particular concern

2 With regard to ongoing ITU-R studies related to WRC-15, Agenda item 1.1, the COMSAR Sub-Committee noted with great concern the wide range of frequency bands identified by ITU-R WP 5D for future assessment of the suitability for IMT. The Sub-Committee was, in particular, concerned with regard to the consideration of the bands:

.1 1 518-1 559 MHz in use for satellite terminals on board SOLAS ships;

.2 1 559-1 610 MHz in use for RNSS;

.3 1 626.5-1 660.5 MHz in use for satellite terminals on board SOLAS ships;

.4 2 900-3 100 MHz in use for Maritime radionavigation (S-band radar); and

.5 3 400-4 200 MHz partly in use for feeder links of Inmarsat.

The frequency band 2 900-3 100 MHz

3 With regard to point 2.4 above, the COMSAR Sub-Committee noted that the S-band radar is of particular importance for safety of navigation (safety of life service) and for use in adverse weather conditions, for instance heavy rain. This band is currently heavily used by commercial shipping (e.g. Oil Tankers, Containerships, LNG Carriers, & Cruise Ships). IMO's International Convention for the Safety of Life at Sea (SOLAS) contains mandatory requirements for commercial shipping above 3,000 gross tonnage to carry navigational radars operating in this frequency band. This maritime radar service is used operationally not only in the open oceans, but importantly in coastal and port areas for critical navigation.

4 It is further important to note that previous ITU-R studies on sharing with the frequency band 2 900 to 3 100 MHz are no longer valid, because new generation radar equipment had not been taken into account.

5 Allowing coexistence in this frequency band of a very critical safety of life maritime service with other (radar) services (see ITU-R Document 5B/101) would adversely impact maritime safety.

IMO's request to ITU-R

6 IMO requests ITU-R ensure that any future sharing scenario should not affect the interests of the maritime services in general, and that the JTG 4-5-6-7 consider excluding the bands in paragraph 2 under consideration for IMT services due to the potential adverse impact to maritime safety and the efficient movement of international commerce.

7 IMO further requests to be consulted on any proposed solution to satisfy WRC-15, Agenda item 1.1 involving a frequency band allocated for use by maritime services.

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ANNEX 6

LIAISON STATEMENT TO ITU-R WORKING PARTY 4A AND CIRM

WRC-15 AGENDA ITEM 1.8

Broadband satellite earth stations aboard vessels (ESV)

The International Maritime Organization (IMO) would like to thank ITU-R WP4A for its studies in support of and its review of the provisions relating to broadband satellite earth stations aboard vessels (ESV) operating in the C and Ku bands, and related studies. Your work especially in support of WRC-15 Agenda item 1.8 is helping make ESV systems available to mariners, benefiting IMO members and the broadband needs of ships at sea.

Matters Related to WRC-15 Agenda Item 1.8

The IMO Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its seventeenth session (21 to 25 January 2013) has reviewed Resolution 902 (WRC-2003) which will be considered for modification at WRC15, and in particular its provisions that limits the use of ESVs to 125 km "from the low-water mark as officially recognized by the coastal State" for Ku band and 300 km for C band "without the prior agreement of any Administration". Recognizing the need to continue to protect the other services to which the 5 925-6 425 MHz and 14-14.5 GHz are allocated, IMO requests that modifications to Resolution 902 (WRC-2003) permit ESVs to operate by the mariner in an uncomplicated, straightforward manner closer to the shore. While also recognizing the differing needs of administrations, IMO further requests that Resolution 902 (WRC-2003) as modified seek to avoid, to the extent practical, any complicated ESV operational restrictions outside of an Administration's national waters.

Liaison with IMO's Sub-Committee on Radiocommunications and Search and Rescue (COMSAR)

It would be beneficial for the needs of shipping to be considered in these ongoing discussions and decisions regarding the use of satellite earth stations aboard ships, both in relation to WRC-15 Agenda item 1.8 and in the development of other reports and recommendations unrelated to this WRC agenda item. Therefore, the IMO COMSAR Sub-Committee respectfully requests ITU-R Working Party 4A to liaise with IMO regarding any matter that affects the operation of these earth stations aboard ships or the responsibilities of those who operate these earth stations aboard ships.

CIRM

Requests CIRM to advise COMSAR on the relevant standards, or standards that need to be developed, related to ESV emissions.

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ANNEX 7

DRAFT COMSAR CIRCULAR

GUIDANCE ON THE USE OF THE GRAPH AT FIGURE N.14, AS CONTAINED IN APPENDIX N OF IAMSAR MANUAL, VOLUME II

1 The Maritime Safety Committee, at its [ninety-second session (12 to 21 June 2013)], noted that concerns were raised about the graph, approved by MSC 90 (MSC.1/Circ.1415, annex, page 47) as a replacement for figure N.14 contained in appendix N of the IAMSAR Manual, Volume II. The Committee further noted that the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its seventeenth session (21 to 25 January 2013), had reconsidered the issue and developed Guidance on the use of the graph in figure N.14, as contained in appendix N of IAMSAR Manual, Volume II.

2 The Committee noted that concern had been expressed that, compared to the graph being replaced, significantly increased search times were being recommended, particularly at low water temperatures, without sufficient justification for such a change being included in the updated text of chapter 3 of IAMSAR Manual, Volume II. This circular had been prepared to provide the necessary additional explanation, which would finally be incorporated in the 2016 edition of the IAMSAR Manual.

3 Member Governments are invited to bring the information to the attention of all parties concerned.

* * *

**GUIDANCE ON THE USE OF THE GRAPH AT FIGURE N.14,
AS CONTAINED IN APPENDIX N OF IAMSAR MANUAL, VOLUME II**

1 The 2013 edition of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual incorporates amendments to the "General Considerations for the SMC" in chapter 3 of Volume II and in appendix N to that volume. The particular amendments at paragraph 3.8.6 and in the associated figure N.14 provide updated advice on survivor life expectancy; advice based on expert medical opinion and the latest scientific data.

2 Figure N-14, as amended, shows a "Realistic upper limit of survival time for people in the water wearing normal clothing, from time of entry into the water". Some concern has been expressed that, compared to the graph being replaced, significantly increased search times are being recommended, particularly at low water temperatures, without sufficient justification for such a change being included in the chapter 3 text. This circular is published to provide the necessary additional explanation, which will be incorporated in the IAMSAR Manual itself in its 2016 edition.

3 It is important to note that the two graphs – figure N.14 in the 2010 edition of IAMSAR, and figure N.14 as now revised for the 2013 edition – do not show the same things. In particular, the figure in the 2010 edition shows an "average" survival time, not a "realistic upper limit".

4 However, the line in the new figure in the 2013 edition is based on the maximum survival time obtained from surveys of the United Kingdom and the United States immersion incidents across a range of water temperatures and conditions. Coincidentally, the line equates to the 50 per cent survival time curve used in previous editions of IAMSAR Manual and many other survival manuals, multiplied by a "safety factor" of three. Generally, the recommendation has been to multiply the 50 per cent survival time curve by such a factor to cover individual variation in survival time. Thus the line in the revised figure N-14, obtained from actual immersion incidents and supported by the latest experimental data, supports the previous approach of multiplying the 50 per cent survival curve by the "safety factor" of three.

5 When using these data to help determine a search time, it is important to note the full supporting guidance given at paragraph 3.8.6 of IAMSAR Manual Volume II, as well as the full title of figure N.14. The graph shows a "realistic upper limit of survival time for people in the water wearing normal clothing" (that is, clothing which may be considered as normal wear in the particular circumstances). The graph shows a reasonable upper limit for search duration in these circumstances. But it does not apply directly to people in additional protective clothing, nor to people who may have managed to get themselves wholly or partly out of the water: both might survive for *longer* times than the graph indicates. Neither should figure N.14 be taken to imply that people in the water wearing normal clothing will survive for the time shown on the graph. Other factors, described in paragraph 3.8.6 of IAMSAR Volume II, should be taken into account. Particularly at lower temperatures, many people in the water in normal clothing will only survive for significantly shorter periods than the maxima shown in the new figure N.14.

6 It should also be noted that the graph in figure N.14 only extends to a maximum water temperature of 20°C/68°F. Above this temperature survival depends even more on individual circumstances and a "realistic upper limit of survival time" cannot be usefully determined.

7 The full guidance given in IAMSAR Volume II, and amplified in this circular, should be carefully considered by the search planner. In particular, the line in figure N.14 should not be used alone to determine a search time. In the great majority of cases, particularly at low temperatures, survival times for people in the water in normal clothing will be significantly less than the upper limit shown in the figure, due to rapidly evoked responses ("cold shock") that result in early drowning or cardiac problems. Conversely, if there is a possibility that the search target may not be in the water, and/or may be equipped with additional protective clothing, survival is possible over longer time periods. These basic facts have clear implications for the speed at which a search should be conducted as well as for its overall duration.

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ANNEX 8

DRAFT SN CIRCULAR

INFORMATION ON THE DISPLAY OF AIS-SART, AIS MAN OVERBOARD AND EPIRB-AIS DEVICES

1 The Maritime Safety Committee, at its [ninety-second session (12 to 21 June 2013)], noted the issue of developments in location devices using AIS technology.

2 Although international and national consideration of these devices is ongoing, they are available for use and will be displayed on shipborne AIS equipment. Therefore, it was considered that information for seafarers was needed. Accordingly, the Committee approved the circulation of the attached information to seafarers on the display of AIS-SART, AIS Man overboard (MOB) and EPIRB-AIS devices, prepared by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its seventeenth session (21 to 25 January 2013), taking into account the recommendation of the Sub-Committee on Safety of Navigation (NAV), at its fifty-eighth session (2 to 6 July 2012).

3 The Committee further noted that the use of these devices might need to be reviewed in the more general context of GMDSS and the role of AIS. This information, therefore, might be reviewed during the process of review and modernization of the GMDSS.

4 Member Governments are invited to bring the information to the attention of all parties concerned.

* * *

ANNEX

DRAFT SN CIRCULAR

INFORMATION ON THE DISPLAY OF AIS-SART, AIS MAN OVERBOARD AND EPIRB-AIS DEVICES

1 This circular provides information on the display of AIS-SART, AIS Man Overboard (MOB) and EPIRB-AIS devices today. AIS-SARTs (AIS-search and rescue transmitters) are part of the GMDSS and have been able to be used as an alternative to radar (X-band) search and rescue radar transponders (SARTs) on SOLAS ships since 1 January 2010.

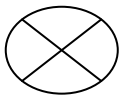
2 EPIRB-AIS devices will be 406 MHz distress alerting devices that contain an additional AIS transmitter developed using the same AIS-SART technology, where the AIS component is used as an aid in locating that EPIRB-AIS.

3 AIS Man Overboard (MOB) devices are now available as locating aids for persons at risk in the water. Once such a situation has been determined as being an emergency, AIS Man Overboard (MOB) devices may be used as an aid in locating that person.

4 In order to protect the integrity of the VHF data link used by AIS, AIS devices, including AIS-MOB devices, are not intended to be used to routinely locate or track people not being in an emergency situation.

AIS-SART

5 AIS-SARTs may be indicated on a newer graphical display of AIS by a circle with an "X" inside it, as shown (extract from SN.1/Circ.243/Add.1):

Topic	Symbol
AIS search and rescue transmitter (AIS-SART)	

6 Alternatively, the AIS-SART may be indicated on an older graphical display of AIS as a normal (sleeping) AIS target (isosceles triangle), as shown (extract from SN.1/Circ.243), taking into account that the triangle may be oriented by Course over Ground (COG):

Topic	Symbol
AIS Target	

7 The symbol remains the same, whether the AIS-SART is in Active or Test Mode; however, there is associated message text displayed, when an AIS-SART target is selected.

8 An AIS-SART uses the following associated message text:

SART ACTIVE means an AIS-SART in Active Mode.
SART TEST means an AIS-SART in Test Mode.
The maritime identity format used is: 970xxyyyy (where "xxyyyy" are numerals from 0 to 9)

AIS Man Overboard (MOB)

9 A Man Overboard (MOB) device using AIS will be displayed in the same way as an AIS-SART (see paragraphs 5 to 7 above).

10 A Man Overboard (MOB) device using AIS may use the same associated message text as in paragraph 8 above, but newer devices might have associated message text displayed as follows:

MOB ACTIVE indicates an AIS-based MOB device in Active Mode.
MOB TEST indicates an AIS-based MOB device in Test Mode.
The maritime identity format used is: 972xxyyyy (where "xxyyyy" are numerals from 0 to 9).

EPIRB-AIS

11 EPIRB-AIS devices will be displayed in the same way as an AIS-SART (see paragraphs 5 to 7 above).

12 EPIRB-AIS devices may use the same associated message text as in paragraph 8 above, but newer devices might have associated message text displayed as follows:

EPIRB ACTIVE indicates a 406 MHz EPIRB that contains an additional AIS transmitter indicating that the EPIRB is in Active Mode.
EPIRB TEST indicates a 406 MHz EPIRB that contains an additional AIS transmitter indicating that the EPIRB is in Test Mode.
The maritime identity used is: 974xxyyyy (where "xxyyyy" are numerals from 0 to 9).

13 The user identity of the EPIRB-AIS indicates the identity of the AIS transmitter of the EPIRB-AIS and not the MMSI of the ship.

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ANNEX 9

DRAFT COMSAR CIRCULAR

AUDITS OF LRIT DATA CENTRES AND OF THE INTERNATIONAL LRIT DATA EXCHANGE CONDUCTED BY THE LRIT COORDINATOR

1 The Maritime Safety Committee, at its eighty-fifth session, appointed the International Mobile Satellite Organization (IMSO) as the LRIT Coordinator and requested the LRIT Coordinator to perform the functions and duties specified in paragraphs 14.1 to 14.5 of the *Revised performance standards and functional requirements for the long-range identification and tracking (LRIT) of ships* adopted by resolution MSC.263(84), as amended.

2 The Sub-Committee on Radiocommunications and Search and Rescue, at its seventeenth session (21 to 25 January 2013), prepared the attached list of audits conducted by the LRIT Coordinator, as of 16 November 2012.

3 The present circular supersedes COMSAR.1/Circ.54 issued on 28 May 2012.

* * *

ANNEX

AUDITS OF LRIT DATA CENTRES AND OF THE INTERNATIONAL LRIT DATA EXCHANGE CONDUCTED BY THE LRIT COORDINATOR (as of 16 November 2012)

LRIT ID	Name of LRIT system component	Integration date	Audit	Submitted to	Remarks
0001	DDP				Not applicable
0002	IDE	15/10/2009	1st 2nd 3rd	MSC 88 MSC 89 COMSAR 17	
3002	Algeria NDC	08/11/2010	1st	COMSAR 17	
3004	Antigua and Barbuda NDC	19/06/2009	1st 2nd	MSC 88 COMSAR 16	
3005	Argentina NDC	14/04/2011	1st	COMSAR 17	
3006	Australia NDC	30/06/2009	1st 2nd	MSC 88 COMSAR 16	
3008	Azerbaijan NDC	22/02/2010	1st 2nd	COMSAR 16 COMSAR 17	
3009	Bahamas NDC	19/12/2008	1st 2nd 3rd	MSC 87 COMSAR 16 COMSAR 17	
3010	Bahrain NDC	08/09/2009	1st 2nd	MSC 89 COMSAR 16	
3011	Bangladesh NDC	07/12/2010	1st	COMSAR 17	
3012	Barbados NDC	15/07/2009	1st 2nd	MSC 88 COMSAR 16	
3015	Belize NDC	03/08/2009	1st 2nd	MSC 88 COMSAR 16	
3206	Bermuda (United Kingdom) NDC	16/09/2009	1st 2nd	MSC 89 COMSAR 17	
3018	Brazil NDC	18/01/2009	1st	MSC 87	Converted to Brazil RDC on 19/07/2010
3303	Brazil RDC	19/07/2010	1st	COMSAR 16	
3019	Brunei Darussalam NDC	15/12/2010	1st	COMSAR 17	
3021	Cambodia NDC	17/02/2012			First audit not due yet
3023	Canada NDC	30/12/2008	1st 2nd 3rd	MSC 87 COMSAR 16 COMSAR 17	
3208	Cayman Islands (United Kingdom) NDC	27/07/2009	1st 2nd	MSC 88 COMSAR 16	

LRIT ID	Name of LRIT system component	Integration date	Audit	Submitted to	Remarks
3025	Chile NDC	18/08/2009	1st 2nd	MSC 88 COMSAR 17	
3026	China NDC	20/07/2009	1st 2nd 3rd	MSC 89 COMSAR 16 COMSAR 17	
3028	Comoros NDC	13/01/2011	1st	COMSAR 17	
3032	Croatia NDC	18/09/2009	1st	MSC 89	No longer in production (Croatia joined the European Union CDC on 13/01/2011)
3036	Democratic People's Republic of Korea NDC	02/07/2010	1st 2nd	COMSAR 16 COMSAR 17	
3040	Dominica NDC	01/04/2011			In progress
3042	Ecuador NDC	15/04/2010	1st	COMSAR 17	
3043	Egypt NDC	04/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3302	European Union CDC	04/06/2009	1st 2nd 3rd	MSC 88 COMSAR 16 COMSAR 17	
3217	Faroes (Denmark) NDC	17/09/2009	1st 2nd	MSC 89 COMSAR 17	
3060	Guyana NDC	16/06/2011	1st	COMSAR 17	
3065	India NDC	07/08/2009	1st 2nd 3rd	MSC 88 COMSAR 16 COMSAR 17	
3066	Indonesia NDC	04/12/2009	1st 2nd	MSC 89 COMSAR 17	
3067	Islamic Republic of Iran NDC	14/09/2011			In progress
3212	Isle of Man (United Kingdom) NDC	03/08/2009	1st 2nd	MSC 88 COMSAR 16	
3070	Israel NDC	18/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3072	Jamaica NDC	28/07/2009	1st 2nd	MSC 88 COMSAR 16	
3073	Japan NDC	31/03/2009	1st 2nd 3rd	MSC 88 COMSAR 16 COMSAR 17	
3074	Jordan NDC	28/09/2009	1st 2nd	MSC 89 COMSAR 17	

LRIT ID	Name of LRIT system component	Integration date	Audit	Submitted to	Remarks
3076	Kenya NDC	27/05/2010	1st 2nd	COMSAR 17 COMSAR 17	
3078	Kuwait NDC	24/02/2010	1st	COMSAR 16	No longer in production (Kuwait joined the Bahrain NDC on 11/09/2012)
3081	Liberia NDC	06/08/2009	1st 2nd	MSC 88 COMSAR 16	
3087	Malaysia NDC	01/09/2010	1st	COMSAR 17	
3090	Marshall Islands NDC	29/12/2008	1st 2nd 3rd	MSC 87 COMSAR 16 COMSAR 17	
3092	Mauritius NDC	22/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3096	Montenegro NDC	13/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3097	Morocco NDC	16/11/2009	1st	MSC 89	
3099	Myanmar NDC	14/09/2009	1st 2nd	MSC 89 COMSAR 16	
3104	Nigeria NDC	16/02/2010	1st 2nd	COMSAR 16 COMSAR 17	
3304	Pacific CDC	09/02/2010			Pending
3107	Pakistan NDC	29/10/2009	1st 2nd	MSC 89 COMSAR 17	
3108	Panama NDC	16/09/2009	1st 2nd	MSC 89 COMSAR 17	
3112	Philippines NDC	25/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3017	Plurinational State of Bolivia NDC	15/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3115	Qatar NDC	03/03/2010	1st 2nd	COMSAR 16 COMSAR 17	No longer in production (Qatar joined the Bahrain NDC on 11/09/2012)
3116	Republic of Korea NDC	16/03/2009	1st 2nd 3rd	MSC 88 COMSAR 16 COMSAR 17	
3119	Russian Federation NDC	24/09/2009	1st 2nd	MSC 89 COMSAR 17	

LRIT ID	Name of LRIT system component	Integration date	Audit	Submitted to	Remarks
3120	Saint Kitts and Nevis NDC	01/12/2009	1st 2nd	MSC 89 COMSAR 17	
3122	Saint Vincent and the Grenadines NDC	15/07/2009	1st 2nd	MSC 88 COMSAR 17	
3128	Seychelles NDC	25/02/2011	1st	COMSAR 17	
3129	Sierra Leone NDC	27/07/2009	1st 2nd	MSC 89 COMSAR 16	
3130	Singapore NDC	24/07/2009	1st 2nd	MSC 88 COMSAR 16	
3134	South Africa NDC	02/09/2009	1st 2nd	MSC 89 COMSAR 17	
3142	Thailand NDC	20/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3147	Turkey NDC	05/03/2010	1st 2nd	COMSAR 16 COMSAR 17	
3148	Tuvalu NDC	08/07/2009			Converted to Pacific CDC on 09/02/2010
3149	Ukraine NDC	03/05/2010	1st 2nd	COMSAR 16 COMSAR 17	
3150	United Arab Emirates NDC	22/03/2010	1st 2nd	COMSAR 16 COMSAR 17	No longer in production (the United Arab Emirates joined the Bahrain NDC on 11/09/2012)
3152	United Republic of Tanzania NDC	14/01/2010	1st 2nd	COMSAR 16 COMSAR 17	
3153	United States NDC	15/12/2008	1st 2nd 3rd	MSC 88 COMSAR 16 COMSAR 17	
3155	Vanuatu NDC	11/08/2009	1st 2nd	MSC 88 COMSAR 16	
3156	Venezuela NDC	18/06/2010			Pending

Note:
Summary audit reports submitted by the LRIT Coordinator are contained in the following documents: MSC 87/6/8 (Secretariat), MSC 88/INF.14 (Secretariat), MSC 89/INF.14 (Secretariat), COMSAR 16/13/1 (IMSO), COMSAR 17/INF.4 (IMSO), COMSAR 17/INF.4/Add.1 (IMSO).

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ANNEX 10

DRAFT MSC RESOLUTION

RESOLUTION MSC.[…](92)
(adopted on […])

OPERATION OF THE INTERNATIONAL LRIT DATA EXCHANGE AFTER 2013

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO the provisions of regulation V/19-1 (Long-range identification and tracking (LRIT) of ships) of the International Convention for the Safety of Life at Sea (SOLAS), 1974 as amended (the Convention) and, in particular, paragraph 10.1 of the *Revised performance standards and functional requirements for the long-range identification and tracking (LRIT) of ships*, adopted by resolution MSC.263(84), as amended by resolution MSC.330(90),

FURTHER RECALLING that, at its eighty-ninth session, it adopted resolution MSC.322(89) on Operation of the International LRIT Data Exchange (IDE) with respect to the operation of the IDE until 31 December 2013,

BEARING IN MIND that, at its ninetieth session, it agreed with a proposal for the continuation of the hosting, maintenance and operation of the IDE by the European Maritime Safety Agency (EMSA) and of its disaster recovery site by the United States beyond 2013,

HAVING CONSIDERED, at its [ninety-second] session, the need to put in place all the necessary arrangements so as to ensure the continuous operation of the IDE after 31 December 2013,

1. EXPRESSES its appreciation to Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the United Kingdom and the European Commission for their generous offers to continue hosting, maintaining and operating the IDE by EMSA beyond 2013, at no cost to either the Contracting Governments to the Convention or the Organization;

2. EXPRESSES ALSO its appreciation to the United States for their generous offers to continue hosting, maintaining and operating the disaster recovery site of the IDE beyond 2013, at no cost to either the Contracting Governments to the Convention or the Organization;

3. AGREES that EMSA should continue hosting, maintaining and operating the IDE at EMSA premises in Lisbon, Portugal, beyond 2013, until advised otherwise;

4. AGREES ALSO that the United States should continue hosting, maintaining and operating the disaster recovery site of the IDE at the United States Coast Guard Operations System Center (OSC), subject to their national procurement regulations, beyond 2013, until advised otherwise.

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ANNEX 11

PROPOSED BIENNIAL AGENDA FOR THE 2014-2015 BIENNIUM AND ITEMS ON THE COMMITTEE'S POST-BIENNIAL AGENDA THAT FALL UNDER THE PURVIEW OF THE SUB-COMMITTEE

PROPOSED BIENNIAL AGENDA FOR THE 2014-2015 BIENNIUM*

Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.10	Cooperation with ICAO: annual meeting of the Joint ICAO/IMO Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue (monitoring of SAR developments, continuous review of the IAMSAR Manual and developing recommendations)	MSC	COMSAR	DE	Continuous
1.1.2.12	**Cooperation with ITU: consideration of matters related to the Radiocommunication ITU R Study Group and ITU World Radiocommunication Conference**	MSC	COMSAR	NAV	Continuous
1.1.2.16	Liaison statements to/from IEC: radiocommunications and safety of navigation	MSC	COMSAR	NAV	Continuous
1.1.2.19	Liaison statements to/from ITU: radiocommunications	MSC	COMSAR	NAV	Continuous
1.1.2.20	Liaison statements to/from UNHCR: persons rescued at sea	MSC/FAL	COMSAR	NAV	Continuous
1.3.5.2	**Development of amendments to the IAMSAR Manual**	MSC	COMSAR		Continuous
2.0.3.1	Technical guidance for the establishment of regional MRCCs and MRSCs in Africa, supported by the ISAR Fund	MSC	Secretariat	COMSAR	Continuous

* Proposed modifications to the Sub-Committee's 2012-2013 biennial agenda, as set out in annex 36 to document MSC 91/22. Outputs printed in bold have been selected for the draft provisional agenda for COMSAR 18, as shown in annex 2. Struck-out text indicates proposed deletions and shaded text indicates proposed changes. Deleted outputs will be maintained in the report on the status of planned outputs. Output numbers subject to change by A 28.

Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
2.0.3.2	**Further development of the Global SAR Plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS**	MSC	COMSAR		Continuous
2.0.3.4	Reports on the Cospas-Sarsat System monitored and the list of IMO documents and publications which should be held by MRCCs updated	MSC	Secretariat	COMSAR	Continuous
2.0.3.5	**Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters**	MSC	COMSAR		~~[2013~~ 2014]
5.1.2.2	**Development of measures to protect the safety of persons rescued at sea**	MSC FAL	COMSAR	FSI	~~[2013~~ 2014]
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC/MEPC	DE	COMSAR/FP/NAV/ SLF/STW	2014
~~5.2.4.2~~	~~Revision of the Recommendation for the protection of the AIS VHF Data Link (resolution MSC.140(76))~~	~~MSC~~	~~COMSAR~~		~~2013~~
5.2.4.4	Implementation of LRIT system	MSC	COMSAR		Continuous
5.2.4.6	**Consideration of LRIT matters**	MSC	COMSAR		Continuous
5.2.4.13 (UO)	Revision of the Guidelines for the on board operational use of shipborne automatic identification systems (AIS)	MSC	NAV	COMSAR	2013
5.2.5.1	**Consideration of operational and technical coordination provisions of maritime safety information (MSI) services, including development and review of related documents**	MSC	COMSAR		Continuous
~~5.2.5.2~~	~~Development of measures to avoid false distress alerts~~	~~MSC~~	~~COMSAR~~		~~2013~~
5.2.5.3	**Further development of the GMDSS master plan on shore-based facilities**	MSC	COMSAR		Continuous

Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
5.2.5.4	**Consideration of developments in Inmarsat and Copsas-Sarsat**	MSC	COMSAR		Continuous
5.2.5.5	**Developments in maritime radiocommunication systems and technology**	MSC	COMSAR		~~[2013~~ 2014]
~~5.2.5.6~~	~~Scoping exercise to establish the need for a review of the elements and procedures of the GMDSS~~	~~MSC~~	~~COMSAR~~		~~2012~~
5.2.5.7	Detailed review endorsed by COMSAR 19 and approved by MSC 95; and First outline of the Modernization Plan	MSC	COMSAR	NAV/STW	2015
5.2.6.1	**Development of an e-navigation strategy implementation plan**	MSC	NAV	COMSAR/STW	~~[2013~~ 2014]

ITEMS ON THE COMMITTEE'S POST-BIENNIAL AGENDA THAT FALL UNDER THE PURVIEW OF THE SUB-COMMITTEE*

MARITIME SAFETY COMMITTEE (MSC)								
ACCEPTED POST-BIENNIAL OUTPUTS								
Number	**Biennium approved**	**Reference to HLA**	**Description**	**Parent organ(s)**	**Coordinating organs(s)**	**Associated organ(s)**	**Timescale (sessions)**	**References**
38	2016-2017	5.2.5	Modernization Plan endorsed by COMSAR 21 and approved by MSC 98	MSC	COMSAR	NAV/STW	2	MSC 90/28, paragraph 25.40

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* Refer to annex 38 of document MSC 91/22.

ANNEX 12

DRAFT PROVISIONAL AGENDA FOR COMSAR 18

	Opening of the session
1	Adoption of the agenda
2	Decisions of other IMO bodies
3	Review and modernization of the GMDSS
4	Further development of the GMDSS master plan on shore-based facilities
5	Consideration of operational and technical coordination provisions of maritime safety information (MSI) services, including the development and review of the related documents
6	Consideration of radiocommunication ITU-R Study Group matters
7	Consideration of ITU World Radiocommunication Conference matters
8	Consideration of developments in Inmarsat and Cospas-Sarsat
9	Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters
10	Further development of the Global SAR Plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS
11	Developments in maritime radiocommunication systems and technology
12	Development of amendments to the IAMSAR Manual
13	Development of measures to protect the safety of persons rescued at sea
14	Development of an e-navigation strategy implementation plan
15	Consideration of LRIT-related matters
16	Biennial agenda and provisional agenda for COMSAR 19
17	Election of Chairman and Vice-Chairman for 2014 and 2015
18	Any other business
19	Report to the Maritime Safety Committee

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ANNEX 13

REPORT ON THE STATUS OF PLANNED OUTPUTS FOR THE 2012-2013 BIENNIUM

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE								
Planned output number in the HLAP for 2012-2013	**Description**	**Target completion year**	**Parent organ(s)**	**Coordinating organ(s)**	**Associated organ(s)**	**Status of output for Year 1**	**Status of output for Year 2**	**References**
1.1.2.10	Cooperation with ICAO: annual meeting of the Joint ICAO/IMO Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue (monitoring of SAR developments, continuous review of the IAMSAR Manual and developing recommendations)	Continuous	MSC	COMSAR	DE	Ongoing	Ongoing	COMSAR 17/17, section 6
1.1.2.12	Cooperation with ITU: consideration of matters related to the Radiocommunication ITU-R Study Group and ITU World Radiocommunication Conference	Continuous	MSC	COMSAR	NAV	Ongoing	Ongoing	COMSAR 17/17, section 4
1.1.2.16	Liaison statements to/from IEC: radiocommunications and safety of navigation	Continuous	MSC	COMSAR	NAV	Ongoing	Ongoing	COMSAR 17/17, sections 4 and 7
1.1.2.19	Liaison statements to/from ITU: radiocommunications	Continuous	MSC	COMSAR	NAV	Ongoing	Ongoing	COMSAR 17/17, section 4

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE								
Planned output number in the HLAP for 2012-2013	**Description**	**Target completion year**	**Parent organ(s)**	**Coordinating organ(s)**	**Associated organ(s)**	**Status of output for Year 1**	**Status of output for Year 2**	**References**
1.1.2.20	Liaison statements to/from UNHCR: persons rescued at sea	Continuous	MSC/FAL	COMSAR	NAV	Ongoing	Ongoing	COMSAR 17/17, section 10
1.3.5.2	Development of amendments to the IAMSAR Manual	Continuous	MSC	COMSAR		Ongoing	Ongoing	MSC 71/23, paragraph 20.2; COMSAR 17/17, section 8
2.0.3.1	Technical guidance for the establishment of regional MRCCs and MRSCs in Africa, supported by the ISAR Fund	Continuous	MSC	Secretariat	COMSAR	Ongoing	Ongoing	COMSAR 17/17, section 6
2.0.3.2	Further development of the Global SAR Plan for the provision of maritime SAR services, including procedures for routeing distress information in the GMDSS	Continuous	MSC	COMSAR		Ongoing	Ongoing	COMSAR 17/17, section 6
2.0.3.4	Reports on the Cospas-Sarsat System monitored and the list of IMO documents and publications which should be held by MRCCs updated	Continuous	MSC	Secretariat	COMSAR	Ongoing	Ongoing	COMSAR 17/17, sections 5 and 6
2.0.3.5	Development of guidelines on harmonized aeronautical and maritime search and rescue procedures, including SAR training matters	[~~2013~~ 2014]	MSC	COMSAR		In progress	In progress	COMSAR 17/17, section 6

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE								
Planned output number in the HLAP for 2012-2013	**Description**	**Target completion year**	**Parent organ(s)**	**Coordinating organ(s)**	**Associated organ(s)**	**Status of output for Year 1**	**Status of output for Year 2**	**References**
5.1.2.2	Development of measures to protect the safety of persons rescued at sea	[~~2013~~ 2014]	MSC/FAL	COMSAR	FSI	In progress	In progress	MSC 84/24, paragraph 22.36; COMSAR 17/17, section 10
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	2013	MSC/MEPC	DE	COMSAR/FP/NAV/ SLF/STW	In progress	In progress	COMSAR 17/17, section 13
5.2.4.2	Revision of the Recommendation for the protection of the AIS VHF Data Link (resolution MSC.140(76))	2013	MSC	COMSAR		Completed		MSC 89/25, paragraph 22.16; COMSAR 16/17, section 12
5.2.4.4	Non-mandatory instruments: implementation of LRIT system	Continuous	MSC	COMSAR		Ongoing	Ongoing	MSC 89/25, section 6 and paragraph 22.15; COMSAR 17/17, section 12
5.2.4.6	Non-mandatory instruments: consideration of LRIT matters	Continuous	MSC	COMSAR		Ongoing	Ongoing	MSC 89/25, section 6 and paragraph 22.15; COMSAR 17/17, section 12
5.2.4.13 (UO)	Revision of the Guidelines for the on board operational use of shipborne automatic identification systems (AIS)	2013	MSC	NAV	COMSAR	Postponed	Postponed	MSC 90/28, paragraph 25.24

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE								
Planned output number in the HLAP for 2012-2013	**Description**	**Target completion year**	**Parent organ(s)**	**Coordinating organ(s)**	**Associated organ(s)**	**Status of output for Year 1**	**Status of output for Year 2**	**References**
5.2.5.1	Non-mandatory instruments: consideration of operational and technical coordination provisions of maritime safety information (MSI) services, including development and review of related documents	Continuous	MSC	COMSAR		Ongoing	Ongoing	COMSAR 17/17, section 3
5.2.5.2	Development of measures to avoid false distress alerts	2013	MSC	COMSAR		In progress	Completed	MSC 87/24, paragraph 22.35; COMSAR 17/17, section 9
5.2.5.3	Further development of the GMDSS master plan on shore-based facilities	Continuous	MSC	COMSAR		Ongoing	Ongoing	COMSAR 17/17, section 3
5.2.5.4	Consideration of developments in Inmarsat and Copsas-Sarsat	Continuous	MSC	COMSAR		Ongoing	Ongoing	COMSAR 17/17, section 5
5.2.5.5	Developments in maritime radiocommunication systems and technology	[~~2013~~ 2014]	MSC	COMSAR		In progress	In progress	MSC 74/24, paragraph 21.25.1; COMSAR 17/17, section 7
5.2.5.6	Scoping exercise to establish the need for a review of the elements and procedures of the GMDSS	2012	MSC	COMSAR		Completed		MSC 86/26, paragraph 23.20; COMSAR 16/17, section 3

SUB-COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE								
Planned output number in the HLAP for 2012-2013	**Description**	**Target completion year**	**Parent organ(s)**	**Coordinating organ(s)**	**Associated organ(s)**	**Status of output for Year 1**	**Status of output for Year 2**	**References**
5.2.5.7	Draft High-level review completed and First outline of the detailed review of the Global Maritime Distress and Safety System (GMDSS)	2017	MSC	COMSAR	NAV/STW	In progress	In progress	MSC 90/28 Paragraph 25.18 COMSAR 17/17, section 3
5.2.6.1	Non-mandatory instruments: development of an e-navigation strategy implementation plan	2014	MSC	NAV	COMSAR/ STW	In progress	In progress	MSC 85/26, paragraph 23.22; COMSAR 17/17, section 11

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ANNEX 14

STATEMENTS BY DELEGATIONS AND OBSERVERS[1]

AGENDA ITEM 6

Statement by the delegation of Malta

"On behalf of the Malta delegation allow me to make a brief statement on the training courses related to maritime search and rescue delivered by the Malta Search & Rescue Training Centre over the one year period October 2011 to October 2012.

With considerable support from the USCG, the MSSTC was originally established in Malta in 2002. Eventually this training institution evolved into the Maritime Safety and Security Training Centre as an educational facility owned and operated by the AFM that delivers SAR and maritime security related courses. Up to the present date several hundred international students from more than 30 countries have received training at the MSSTC.

In November 2011, the MSSTC provided a one month Mobile Training Team to Israel. This team delivered three simultaneous SAR courses: for SAR Coordinators, SAR Mission Coordinators and On-Scene Coordinators. In total 40 participants attended these courses from public, military and private institutions.

The MSSTC developed a training programme in support of Libya spread over a one-year period. The aim of the programme was to assist Libya in the setting up of a SAR organisation and to develop complementary maritime operational techniques in full compliance with international norms. Following preliminary training delivered by a mobile training team, the MSSTC trained 34 Libyan as SAR Mission Coordinators, On Scene Coordinators and Boarding Officers.

Separately, with part sponsorship from the United States authorities, the MSSTC held a two-week Operational Maritime Law course tailored for maritime practitioners. The course provides students with an understanding of the legal environment within which they operate.

In July/August 2012, a group of 12 students from Black Sea countries completed four weeks of training in Search and Rescue Mission Coordination as per IMO Model Course 3.14 including the use of advanced search planning software. The training course was organised as part of the International Maritime Organization's Integrated Technical Cooperation Program and was hosted by the MSSTC in Malta. . The objective of the course was to train the personnel from RCCs and RSCs in order to strengthen the total SAR capacity in the Black Sea region and increase the co-operation between States pursuant to Chapter 3 of the International Convention on Maritime Search and Rescue, 1979. The need for immediate and extensive SAR training in the Black Sea region was identified in the Training Needs Analysis report prepared in 2003 by IMO consultants. Training places were awarded to a maximum of two participants from each country from the Black Sea region, namely Bulgaria, Georgia, Romania, the Russian Fedration, Turkey and Ukraine. Preference was given to RCC and RSC watchstanders who were qualified and experienced masters or deck officers of ocean-going vessels, radio operators, instructors of air or maritime navigation, traffic controllers, maritime pilots and naval navigators and plotters.

[1] Statements have been included in this annex in the order in which they were given, sorted by agenda items, and in the language of submission (including translation into any other language if such translation was provided).

In September 2012, the MSSTC also carried out another SAR Mission Coordinator course this time partly sponsored by the Swiss Government for North African students.

The Maritime Safety and Security Training Centre would like to thank those Authorities and Organisations which have provided assistance and support so that the extensive training programme outlined above could be completed.

The Maritime Safety and Security Training Centre looks forward to the further development of its training initiatives.

It would be appreciated if a copy of this statement is attached to the final report of the seventeenth session."

Statement by the delegation of Ukraine

"Ukrainian Delegation would like to inform the Sub-Committee on the outcome of the 9th Black Sea Regional Conference on Maritime Search and Rescue and the GMDSS, which was held in Odessa, Ukraine, on 25 and 26 of September 2012.

Six countries participated in the 9th Black Sea SAR Conference: Bulgaria, Georgia, Romania, Russian Federation, Turkey and Ukraine. The delegations were headed by senior representatives from Maritime Administrations, Government Ministries and national authorities responsible for search and rescue and communication.

Substantial time at the conference was allocated to national presentations by the Black Sea countries, which contained comprehensive data and statistics concerning the country's arrangements for the organization of search and rescue, including facilities used in emergency situations. The main findings, conclusions and decisions adopted by the Conference were the following:

1. the Conference approved of the Report on False Alerts for 2011 as provided in COMSAR/Circ.29. The Report is to be submitted by Ukraine, as a host country of the Conference, to the IMO and ICAO for further evaluation and informing the manufacturers of the equipment;

2. the Conference decided to address the COMSAR with the initiative to enhance handling of the GMDSS false alerts by deeper involvement of Coastal and Port States together with the Flag States and also by further improvement of the GMDSS training;

3. the Conference addressed the Black Sea Memorandum of Understanding on Port State Control with the request to focus, in the nearest future, on the GMDSS equipment functioning and training of the crews to use it properly;

4. the Conference encouraged the appropriate regional authorities to undertake the following :

    a) detecting the source and establishing the cause of a false alert;

    b) advising the Port State Control Authorities at the next port of call of the vessel involved as well as the Flag State administration to conduct proper inspection and immediate intervention;

c) monitoring the follow-up for the false alert with respect to particular vessel; and

d) populating the dedicated Black Sea MRCC WEB Portal with the relevant information and keeping it up to date; and

5. it was decided to introduce conducting joint SAR exercise(s) during the subsequent Conferences which are to be organized by a host country in co-operation with neighboring state(s), whereas other BS countries will be represented by observers. Also the Conference welcomed the idea to conduct OSC (On-Scene Coordination) courses in 2013 in Ukraine subject to consultations with the IMO.

The full report of the 9th Black Sea Conference on Maritime Search and Rescue (SAR) and the Global Maritime Distress and Safety System (GMDSS) was provided to the IMO and participating countries, but also is available on request from appropriate SAR authorities via e-mail: msrs@sar.gov.ua."

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